GOVERNMENT OF THE GOLD COAST.

MEDICAL AND SANITARY REPORT

FOR THE YEAR

1910.

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1911.

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[202098]

ANNUAL MEDICAL REPORT FOR THE YEAR ENDING 31st DECEMBER, 1910.

The following Report consists of two parts—the first Medical, by the Principal Medical Officer, the second Sanitary, by the Acting Senior Sanitary Officer, to whom I was requested to assign its preparation. As the line of demarcation between medical and sanitary science is not always easy to define, a certain amount of overlapping has occurred in the Sanitary Report: a not unnatural corollary of independent compilation. It has not been considered necessary to reproduce the incorporated medical data in the purely medical section of the Report.

ADMINISTRATIVE.

STAFF.

The Principal Medical Officer.
The Deputy Principal Medical Officer.
Two Provincial Medical Officers, and
Two Senior Medical Officers.

PROMOTIONS.

Drs. E. H. Tweedy and G. J. Rutherford, Senior Medical Officers, were promoted as Provincial Medical Officers of Ashanti and the Northern Territories.

Dr. H. B. S. Montgomery, Medical Officer, was promoted to be a Senior Medical Officer *vice* Dr. G. J. Rutherford.

TRANSFERS.

Dr. T. E. Rice, Senior Medical Officer, was transferred to the new Sanitary Branch of the Department as Senior Sanitary Officer.

Dr. G. C. Walker was transferred to the Sanitary Branch as Sanitary Officer (Junior).

Dr. C. B. Hunter was transferred to the Gold Coast from Sierra Leone as Senior Medical Officer *vice* Dr. Tichborne.

Dr. P. J. Kelly, Medical Officer, was transferred to Medical Department of Hong Kong.

RESIGNATIONS.

Drs. W. S. Webb, R. Cope and F. S. Sharpe resigned their appointments.

INVALIDINGS.

Dr. J. Tichborne, Senior Medical Officer, was invalided from the service.

Dr. J. C. S. McDouall, Medical Officer, was invalided to England.

DEATHS.

Dr. H. Carlaw, Medical Officer, died in England.

Dr. F. W. W. Whyte, Medical Officer, died at Axim.

Six Special Medical Officers were sent out in connection with the outbreak of Yellow Fever at Seccondee and subsequently appointed to the Staff.

Sir Rubert Boyce visited the Colony in June to examine and report on Yellow Fever.

Dr. A. Kinghorn was appointed a Special Service Medical Officer for Sleeping Sickness Investigation.

During the year a portion of the time of 19 members of the Staff was occupied in the performance of Political and Judicial duties. A detailed statement is appended :—

Dr.	A. M. Dowdall	105	days.
,,	J. Lunn	26	,,
,,	G. F. Forde	16	,,
,,	F. I. M. Jupe	17	,,
,,	T. H. Dugon	10	,,
,,	R. O. White	245	,,
,,	R. Mugliston	26	,,
,,	F. S. Harper	91	,,
,,	P. M. Tobit	14	,,
,,	A. Lundie	104	,,
,,	H. T. Palmer	17	,,
,,	F. J. A. Beringer	48	,,
,,	T. F. Bayfield	131	,,
,,	H. O'H. May	88	,,
,,	J. H. Swan	239	,,
,,	J. A. Beamish	37	,,
,,	J. H. Collier	27	,,
,,	W. W. Claridge	99	,,
,,	M. W. Fraser	10	,,
	Total	1,350	days.

EUROPEAN NURSING STAFF.

The strength of the European Nursing Staff (six) has proved insufficient to meet the requirements of the recently increased European Hospital accommodation.

The appointment of Miss Annie Lee was terminated.

PRINCIPAL MEMBERS OF SUBORDINATE STAFF.

Principal Medical Officer's Office :—1st Grade Clerk, S. G. Ricketts, 2nd Grade Clerk, J. A. Brown, 3rd Grade Clerk, G. Quansah, 5th Grade Clerks, J. R. Antwi and C. A. Akwetey.

1st Class Dispensers :—John Cato and S. P. Bruce.

2nd Class Dispensers :—J. R. Lamptey and H. D. Laryea.

3rd Class Dispensers :—W. B. Hagan, R. P. Williams, Sydney Smith, E. J. B. Plange, F. W. Thompson and W. A. Wellington.

Storekeeper :—F. W. C. Wulff.

FINANCIAL.

EXPENDITURE.

MEDICAL.—The authorized expenditure shown in the 1910 Estimates was £43,620. The actual expenditure was £44,981. There was a saving under "Personal Emoluments" of £110 and an excess of £1,471 over the amount provided for "Other Charges" due to increased Vaccination Expenses necessitated by outbreaks of Small-pox, arrears of Contribution to the Medical Research Laboratory at Lagos, Extra Medical Assistance, and increased number of officers attending Schools of Tropical Medicine, etc.

SANITARY.—The authorized expenditure was £8,537 ; the actual £7,950. This saving was due to unavoidable delay in completing the personnel of the new Sanitary Staff. Under "Other Charges" there was an excess expenditure of £137 due to an unexpected increase in the number of officers travelling.

The Hospitals and Sanitation votes for Ashanti are shown in the Ashanti Estimates although under the control of the Principal Medical Officer.

In addition to the normal expenditure detailed above the following sums were expended under special votes :—

Sleeping Sickness Measures (Colony) .	£999
,, ,, ,, (Ashanti) .	£2,575
Yellow Fever Outbreak	£9,305
Outstanding liabilities in connection with Plague Epidemic	£215

REVENUE.

The total receipts were £1,444, the details of which are shown month by month under their respective headings in the following table :—

Month.	Hospital Fees.		Dispensary fees.	Sale of Drugs.	Sale of Medical Comforts.	Total.
	Officials.	Non-Officials.				
	£	£	£	£	£	£
January	32	51	40	20	1	144
February	34	61	37	18	2	152
March	32	44	44	14	2	136
April	49	41	37	16	2	145
May	38	11	33	13	2	97
June	26	31	23	12	1	93
July	28	52	21	14	2	117
August	43	22	26	16	4	111
September ...	27	49	27	13	1	117
October	36	47	28	12	0	123
November ...	35	33	32	15	0	115
December... ...	29	35	21	9	0	94
Total	409	477	369	172	17	1,444

GENERAL HEALTH.

The attached chart marked "A" shows the monthly rainfall throughout the Colony, Ashanti and the Northern Territories, calculated on the average of the observations recorded at thirteen stations in different parts of the country. In Ashanti and the Northern Territories the rains commence earlier and end later; with a break during July or August, which is more marked the farther north the observations are taken. In the Colony this break is less noticeable and the rainy season as a whole is shorter.

Curves show the monthly rates for Malaria, Respiratory and Gastro-intestinal diseases; and the incidence of the twenty cases of Hæmoglobinuric Fever that occurred during the year is blocked in below.

Comparative statistics of this nature will be more instructive when they can be obtained for a continuous period of ten years; but, although it would be unsafe to make any deductions from the minor variations shown on a chart compiled from the figures for one year only, the numbers are large enough to show the seasonal prevalence of disease with accuracy.

The curve for Malaria begins to rise slowly soon after the rains set in and reaches its greatest height in August. There is then a fall, and a second but smaller rise in October, followed by another fall.

The prevalence of this disease is, of course, in direct proportion to the anopheline rate. It does not begin to rise until some time after the commencement of the rains, because there has not yet been time for any great number of mosquitoes to be bred and become infected. During the heavy rains, moreover, stagnant pools suited to the habits of the anopheles are less numerous and constantly being flushed out by flood water, and it is, therefore, only when the rainfall is decreasing and these pools remain for longer periods that the great rise in the malarial rate takes place. The small secondary rise after the subsequent fall may be deceptive; but is possibly due to the nearly equal rainfall from August to October, which would be sufficient to maintain many suitable pools at a fairly constant level. The suddenness of the falls must also be attributed to some extent to increased vigour in the prosecution of prophylactic measures.

The great prevalence of diseases of the bronchi and lungs during December and January is due to the chilling effects of the Harmattan wind and the irritation set up by inhalation of the fine particles of sand it carries. The later rise from July onwards is accounted for by the general dampness and the frequency with which the people are drenched by the rains.

The curve for Gastro-intestinal diseases coincides fairly well with the rainfall and is mainly due to pollution of the water supplies by surface water from the villages, combined, to some extent, with lowered powers of resistance to disease during the unhealthiest season.

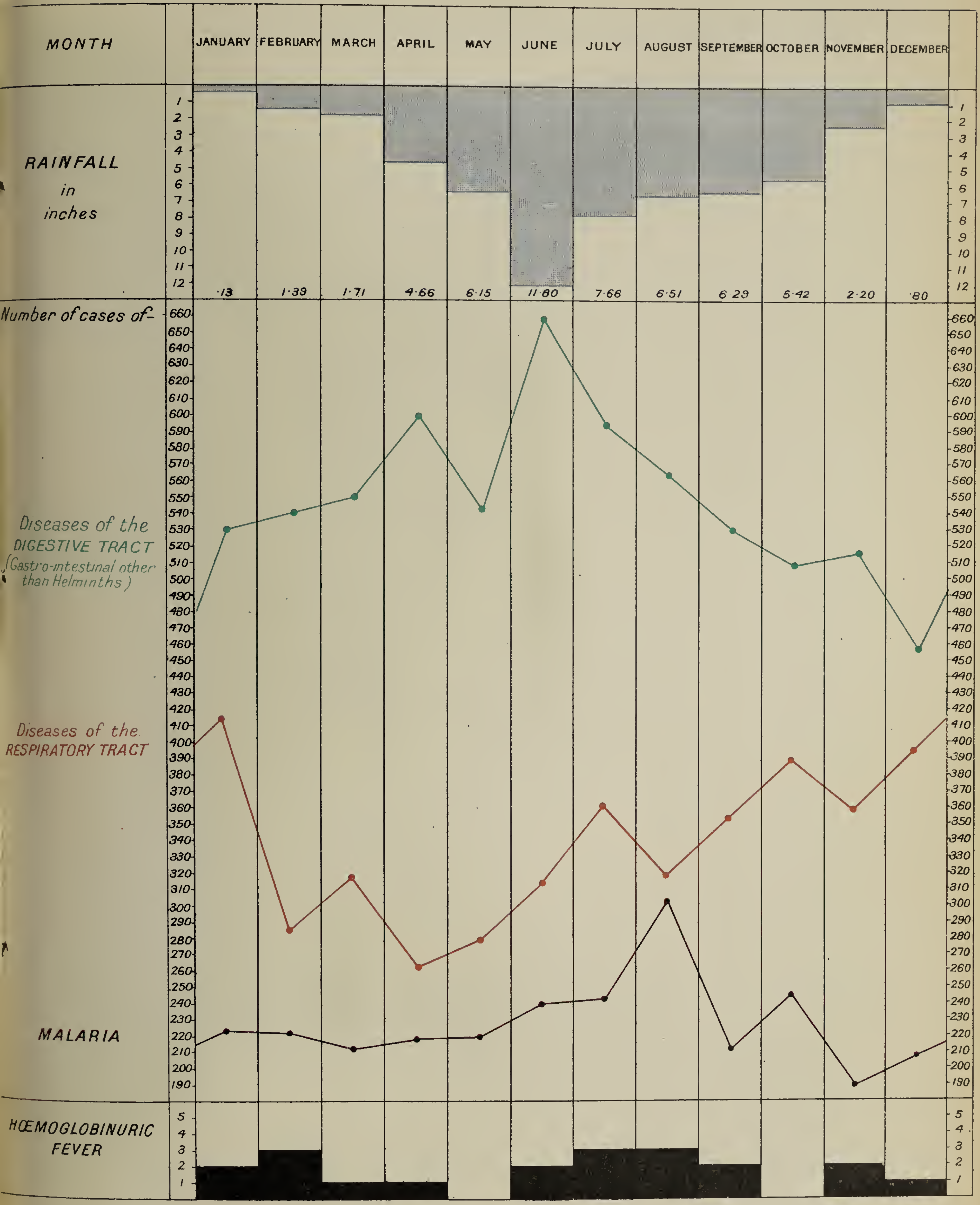
HEALTH OF GOVERNMENT OFFICIALS.

European Officials.

The following table indicates that the health of European officials was not so good as in the preceding year. Although there was a decrease in the number placed on the sick list, there was a considerable increase in the number of days during which officials were ill, and there was also a slight increase in the daily average. Both the invaliding and death rates were higher; the former nearly double that of 1909.

A

GOLD COAST - 1910.



Principal Medical Officer.

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TABLE SHOWING THE SICK, INVALIDING, AND DEATH RATES OF EUROPEAN OFFICIALS.

	1908	1909	1910
Number resident	413	438	475
Total number on sick list...	507	461	438
Total number of days on sick list	3581	2819	3074
Average daily number on sick list	8	6	8
Average number of days on sick list for each patient	9	7	7
Total number invalided	29	17	32
Percentage of invalidings to total residents	7·02	3·88	6·73
Total deaths	6	5	8
Percentage of deaths to total residents	1·45	1·14	1·68

CAUSES OF INVALIDING.

Malarial Fevers	6
Hæmoglobinuric Fever	3
Anæmia	5
Dysentery	1
Heart Disease	2
Neurasthenia	3
Broncho-Pneumonia	1
Trypanosomiasis	1
Gastritis	2
Hepatic Congestion	1
Tuberculosis	1
Enteric Fever	1
Neuritis	1
Paralysis	1
Hepatitis	1
Debility	1
Interstitial Keratitis	1
Total	32

CAUSES OF DEATH.

Malarial Fevers	3
Hepatitis	1
Enteric Fever	1
Yellow Fever	2
Peritonitis	1
Total	8

NATIVE OFFICIALS.

The sick, invaliding and death rates for Native officials, as compared with the preceding years, is shown in the following table.

TABLE SHOWING THE SICK, INVALIDING, AND DEATH RATES OF NATIVE OFFICIALS.

	1908	1909	1910
Total number of officials resident	960	940	922
Total number on sick list...	557	579	420
Total number of days on sick list	4926	2862	3400
Average daily number on sick list	13	7	9
Average number of days on sick list for each patient	8	4	8
Total number invalided	6	3	7
Percentage of invalidings to total residents	0·62	0·32	·75
Total deaths	1	2	1
Percentage of deaths to total residents	·10	0·21	·10

CAUSES OF INVALIDING.

Neurasthenia	1
Rheumatism	2
Amblyopia	1
Chronic Emphysema	1
Neuritis	2
Total	7

Cause of Death.

Pneumonia	1
Total	1

GENERAL EUROPEAN POPULATION.

The general European population consists of :—

(i.) Government Officials.
(ii.) Employés of Trading Firms.
,, Mining Companies.
(iii.) Missionaries.

The strength of the first group is steadily increasing year by year ; that of the others, however, varies considerably and much difficulty is experienced in obtaining as accurate figures regarding it as are available in the case of Government Officers. The system in vogue is unsatisfactory. It depends for its success on the courtesy of individuals ; but, although their courtesy is not called in question, such a method of obtaining statistics is bound to prove faulty. A suggestion was recently put forward that arrivals and departures other than those over the seaboard of the Colony might be regarded as a negligible quantity, and that what is required is an accurate record of embarkations and disembarkations. This could be provided by the agents of the different Shipping Companies or the Pursers of ships landing and embarking passengers ; in existing conditions, the required information is only obtainable through the courtesy of these officials. It has been suggested that the question of some form of legal enactment should be considered.

The following tables may be regarded as fairly accurate.

Table showing the Sick, Invaliding, and Death Rates of Non-officials.

How employed.	Number.	Deaths.	Invalided.	Death rate per cent.	Invaliding rate per cent.
1908					
Merchants, etc.	434	9	41	2·07	9·44
Mining Companies	759	11	46	1·44	6·06
Missionaries	162	4	9	2·46	5·55
Totals	1355	24	96	1·77	7·08

TABLE SHOWING THE SICK, INVALIDING, AND DEATH RATES OF NON-OFFICIALS.

How employed.	Number.	Deaths.	Invalided.	Death rate per cent.	Invaliding rate per cent.
1909					
Merchants	574	9	25	1·21	4·35
Mining Companies ...	585	7	20	1·19	3·41
Missionaries	118	3	4	2·54	3·38
Totals	1,277	19	49	1·32	3·83
1910					
Merchants	422	16	7	3·79	1·65
Mining Companies ...	660	18	33	2·72	5·00
Missionaries	135	4	2	2·96	1·48
Totals	1,217	38	42	3·12	3·45

CAUSES OF INVALIDING.

Malarial Fever	12
Anæmia	3
Hæmoglobinuric Fever . . .	6
Gastritis . , . . .	4
Debility	3
Phthisis	2
Neuritis	1
Dysentery	2
Filariasis	1
" Accident to eyes " . . .	1
" Injury to arm "	2
Mercurial Poisoning . . .	1
Neurasthenia	2
Heart Disease	2
Total	42

CAUSES OF DEATH.

Pneumonia	4
Hæmoglobinuric Fever . . .	10
Malarial Fever	12
Suicide	2
Enteritis	1
Gastric Ulcer.	1
Yellow Fever	8
Total	38

GENERAL NATIVE POPULATION.

Some indication of the general health of the native population has been given in chart " A " ; but the comment made in this connection in the 1907 Report under " Population " still holds, although the subject of compulsory registration of births and deaths has, in the meantime, been occupying the consideration of the Government.

At the few centres in the Colony where the system of issuing and recording " burial permits " obtains the number of burials recorded was 2,099, as against 1,611 in 1909 ; it may be assumed therefore that, as regards the Colony itself, the sickness rate for the year under review decidedly increased.

GAOLS.

The general health of convicts was not good. Although the number undergoing sentences was less than in the previous year, the sickness and death rates were higher.

	1909.	1910.
Total convicts	4911	3001
Total sick	564	385
Total deaths	14	18

LUNATIC ASYLUM.

Number of patients :—

	Remained at end of 1909.	Admitted during 1910.	Discharged.	Died.
Male	65	44	10	23
Female	18	6	5	6
Total ...	83	50	15	29

The mortality rate was high, but the deaths occurred among very old standing cases or those recently admitted in an enfeebled condition ; the causes being, with one exception, those usually common in this class of patient, *e.g.*, Epilepsy, Heart Failure, Inanition, Dysentery and Pulmonary diseases. The number in the latter group was proportionately small ; most of the deaths having occurred during the rainy season. The exception referred to above was a case of Trypanosomiasis.

Food and water supplies were ample and of good quality.

As in previous years, such patients as were fit to work were employed in gardening, clearing the asylum precincts of bush and weeds, carrying water and collecting firewood. 3,930 lbs. of cassava were produced in the asylum gardens.

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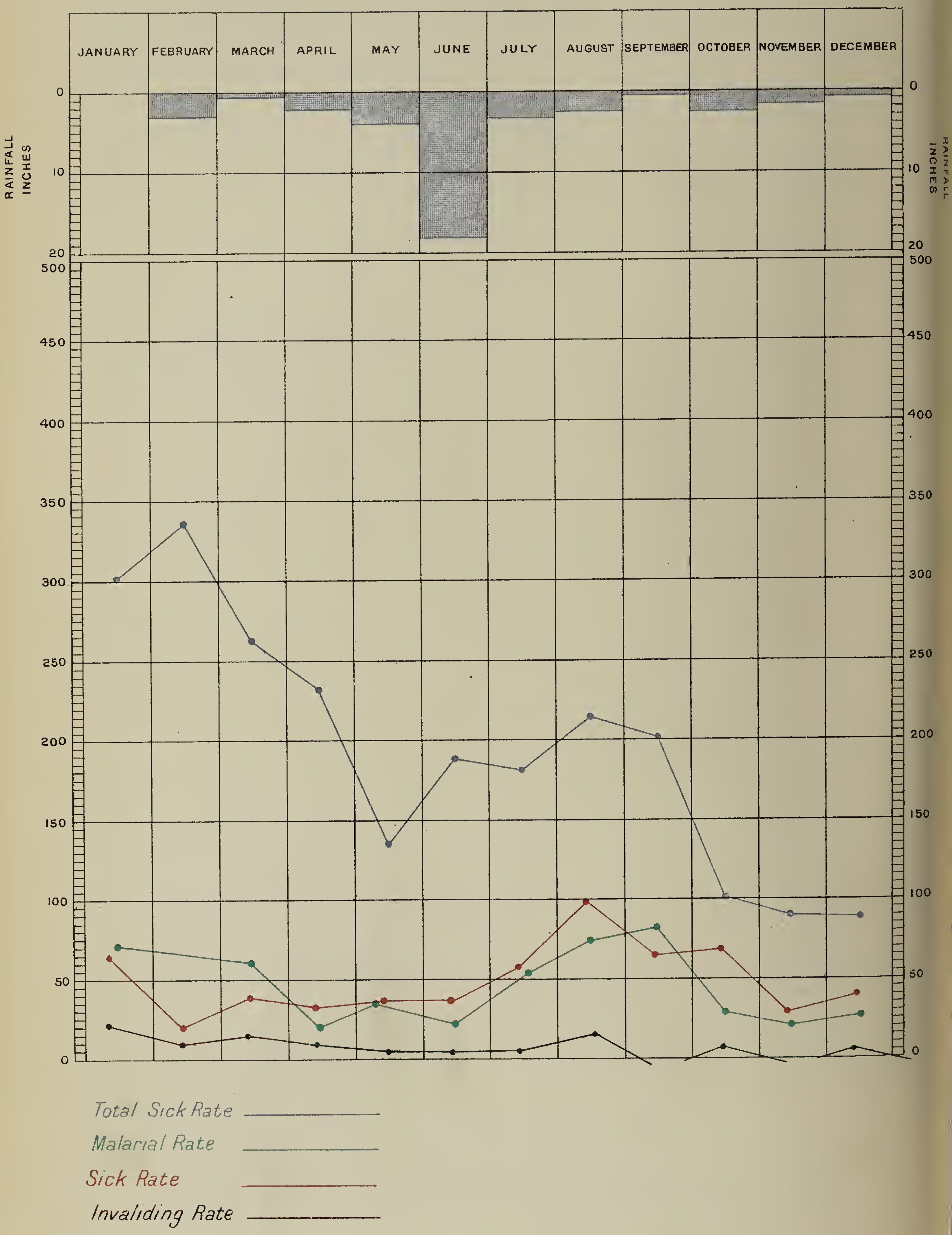
CHART SHOWING SICK, INVALIDING AND MALARIAL RATES PER 1,000 AT ACCRA FOR THE YEAR 1910.



Classification of patients on 31st December, 1910 :—

	Males.	Females.	Total.
Acute Mania	15	2	17
Chronic Dementia...	52	10	62
Melancholia	5	0	5
Idiotic and Epileptic	3	1	4
Undiagnosed	1	0	1
Total	76	13	89

LABORATORY.

The only regular laboratory work done during the year was examining rats for plague bacilli. There were occasional analyses of water, and some microscopical work for purpose of diagnosis and determination of malarial indices among children. Excepting a period of six weeks in November and December it was not possible to detail a Medical Officer exclusively for laboratory work, but during this period the unavoidably interrupted preparation of Small-pox vaccine was gone on with ; the results were encouraging. The first supply of lymph reached its destination within four weeks of its manufacture and gave a success percentage of 15·09 ; the second after a period of six weeks gave a success percentage of 98·1. There is reason to believe that most of the first supply was rendered inactive by heat during the process of sealing the tubes for which at the time there were no proper facilities.

HOSPITALS AND DISPENSARIES.

The construction of new native hospitals was completed at Tamale, Tarquah, Akuse and Winnebah ; and a special fly-proof hospital was built at Anum, in the Volta River District, for the treatment of Sleeping Sickness and the isolation and observation of "suspects."

The number of cases treated in the hospitals and dispensaries in the Colony was :—

	European	900
	Native	26,908
as against		
	European	1,056
	Native	29,293
in 1909.		

ACCRA.*

The chart "B" which has been carried on each year since 1907 shows the sick, invaliding, and malaria rates per 1,000, and their relation to the rainfall. The later rains in November and December of 1909 probably account for the rise in the general sickness and malaria rates in January, and the exceptionally heavy rainfall in June for the later elevation of the rate curve for malaria.

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* Includes one official invalided from the Eastern Province.

EUROPEAN MORTALITY AND INVALIDING RATES, 1910.

Total Strength.		Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials ...	124	0	17	0	137·09
Non-officials ...	106	3	3	28.30	28·30
Totals ...	230	3	20	13·04	86·95

SUMMARY OF HOSPITAL AND DISPENSARY RETURN.

	In-patients.	Out-patients.
Europeans	107	432
Natives, including W.A.F.F. and Civil Police	525	6,049
Totals	632	6,481

Surgical Operations, 283.

EUROPEAN MORTALITY AND INVALIDING RATES, 1909.

Total Strength.		Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials ...	100	1	1	10· 0	60· 0
Non-officials ...	156	3	6	19·23	34·46
Totals ...	256	4	7	15·62	46·87

SUMMARY OF HOSPITAL AND DISPENSARY RETURN.

	In-patients.	Out patients.
Europeans	105	589
Natives, including W.A.F.F. and Civil Police	486	6,564
Totals	591	7,153

Surgical Operations, 101.

SECCONDEE.

EUROPEAN MORTALITY AND INVALIDING RATES, 1910.

Total Strength.		Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials ...	... 70	4	2	57·14	28·57
Non-officials	... 143	12	5	83·91	34·96
Totals	... 213	16	7	75·55	23·47

SUMMARY OF HOSPITAL AND DISPENSARY RETURN.

	In-patients.	Out-patients.
Europeans	149	16
Natives, including W.A.F.F. and Civil Police	326	2,784
Totals	475	2,800

SURGICAL OPERATIONS, 25.

EUROPEAN MORTALITY AND INVALIDING RATES, 1909.

Total Strength.		Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials ...	... 186	0	4	0	21·50
Non-officials	... 150	2	7	13·3	46·6
Totals	... 336	2	11	5·95	32·73

SUMMARY OF HOSPITAL AND DISPENSARY RETURN.

	In-patients.	Out-patients.
Europeans	141	20
Natives, including W.A.F.F. and Civil Police	315	2,356
Totals	456	2,376

SURGICAL OPERATIONS, 50.

CAPE COAST.

EUROPEAN MORTALITY AND INVALIDING RATES, 1910.

Total Strength.		Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials ...	... 30	0	4	0	133·33
Non-Officials	... 39	0	1	0	25·64
Totals	... 69	0	5	0	72·46

SUMMARY OF HOSPITAL AND DISPENSARY RETURN.

	In-Patients.	Out-Patients.
Europeans	25	15
Natives, including W.A.F.F. and Civil Police	233	4,982
Totals	258	4,997

SURGICAL OPERATIONS, 103.

EUROPEAN MORTALITY AND INVALIDING RATES, 1909.

Total Strength.		Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials ...	... 42	1	0	23·80	0
Non-Officials	... 56	1	1	17·85	17·85
Totals	... 98	2	1	20·46	10·20

SUMMARY OF HOSPITAL AND DISPENSARY RETURN.

	In-Patients.	Out-Patients.
Europeans	12	2
Natives, including W.A.F.F. and Civil Police	184	4,554
Totals	196	4,556

SURGICAL OPERATIONS, 45.

AXIM.

EUROPEAN MORTALITY AND INVALIDING RATES 1910.

Total Strength.		Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials ...	15	1	0	66·66	0
Non-officials	98	4	4	40·81	40·81
Totals	113	5	4	44·44	40·81

SUMMARY OF HOSPITAL AND DISPENSARY RETURN.

	In-patients.	Out-patients.
Europeans ...	18	27
Natives, including W.A.F.F. and Civil Police ...	74	2,431
Totals ...	92	2,458

SURGICAL OPERATIONS, 7.

EUROPEAN MORTALITY AND INVALIDING RATES 1909.

Total Strength.		Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials ...	15	0	0	0	0
Non-officials	72	1	8	13·88	111·11
Totals	87	1	8	11·49	91·95

SUMMARY OF HOSPITAL AND DISPENSARY RETURN.

	In-patients.	Out-patients.
Europeans ...	37	30
Natives, including W.A.F.F. and Civil Police ...	106	4,926
Totals ...	143	4,956

SURGICAL OPERATIONS, 15.

SALTPOND.

European Mortality and Invaliding Rates, 1910.

Total Strength.		Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials	19	0	2	0	105·26
Non-officials ...	22	0	0	0	0
Totals ...	41	0	2	0	48·78

Summary of Hospital and Dispensary Return.

	In-patients.	Out-patients.
Europeans	No hospital	7
Natives, including W.A.F.F. and Civil Police	—	1,088
Totals	—	1,095

Surgical Operations, nil.

European Mortality and Invaliding Rates, 1909.

Total Strength.		Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials	7	0	0	0	0
Non-officials ...	5	0	1	0	200·0
Totals ...	12	0	1	0	83·33

Summary of Hospital and Dispensary Return.

	In-patients.	Out-patients.
Europeans	No hospital	3
Natives, including W.A.F.F. and Civil Police	—	1,420
Totals	—	1,423

Surgical Operations, 1.

WINNEBAH.

EUROPEAN MORTALITY AND INVALIDING RATES, 1910.

Total Strength.		Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials ...	42	0	0	0	0
Non-officials ...	26	1	0	38·46	0
Totals ...	68	1	0	14·70	0

SUMMARY OF HOSPITAL AND DISPENSARY RETURN.

	In-patients.	Out-patients.
Europeans	1	34
Natives, including W.A.F.F. and Civil Police	11	2,332
Totals	12	2,366

SURGICAL OPERATIONS, 9.

EUROPEAN MORTALITY AND INVALIDING RATES, 1909.

Total Strength.		Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials ...	30	0	0	0	0
Non-officials ...	39	1	1	25·61	25·61
Totals ...	69	1	1	14·49	14·49

SUMMARY OF HOSPITAL AND DISPENSARY RETURN.

	In-patients.	Out-patients.
Europeans	No hospital.	4
Natives, including W.A.F.F. and Civil Police	—	2,118
Totals	—	2,122

SURGICAL OPERATIONS, 14.

TARQUAH.

European Mortality and Invaliding Rates, 1910.

Total Strength.		Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials	20	1	0	50·00	0
Non-officials ...	700	20	0	28·57	0
Totals ...	720	21	0	28·57	0

Summary of Hospital and Dispensary Return.

	In-patients.	Out-patients.
Europeans	10	31
Natives, including W.A.F.F. and Civil Police	33	953
Totals	43	984

Surgical Operations, 4.

European Mortality and Invaliding Rates, 1909.

Total Strength.		Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials ...	18	0	0	0	0
Non-officials ...	700	6	21	8·57	30·00
Totals ..	718	6	21	8·34	29·24

Summary of Hospital and Dispensary Return.

	In-Patients.	Out-Patients.
Europeans	No hospital	27
Natives, including W.A.F.F. and Civil Police	—	1,078
Totals	—	1,105

Surgical Operations, 6.

ELMINA.

EUROPEAN MORTALITY AND INVALIDING RATES, 1910.

Total strength.		Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials	17	0	0	0	0
Non-officials ...	14	0	0	0	0
Totals ...	31	0	0	0	0

SUMMARY OF HOSPITAL AND DISPENSARY RETURN.

	In-patients.	Out-patients.
Europeans	No European hospital	6
Natives, including W.A.F.F. and Civil Police	3	982
Totals	3	988

SURGICAL OPERATIONS, 9.

EUROPEAN MORTALITY AND INVALIDING RATES, 1909.

Total strength.		Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials	6	0	0	0	0
Non-officials ...	33	0	0	0	0
Totals ...	39	0	0	0	0

SUMMARY OF HOSPITAL AND DISPENSARY RETURN.

	In-patients.	Out-patients.
Europeans	No European hospital	10
Natives, including W A.F.F. and Civil Police	13	1,294
Totals	13	1,304

SURGICAL OPERATIONS, nil.

QUITTAH.

EUROPEAN MORTALITY AND INVALIDING RATES, 1910.

Total strength.		Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials	7	0	0	0	0
Non-officials ...	12	0	1	0	83·33
Totals ...	19	0	1	0	52·63

SUMMARY OF HOSPITAL AND DISPENSARY RETURN.

	In-patients.	Out-patients.
Europeans	No European hospital	4
Natives, including W.A.F.F. and Civil Police	55	1,537
Totals	55	1,541

SURGICAL OPERATIONS, 71.

EUROPEAN MORTALITY AND INVALIDING RATES, 1909.

Total strength.		Deaths.	Invalidings.	Death rate per 1,000.	Invaliding. rate per 1,000.
Officials	5	0	2	0	400·0
Non-officials ...	16	0	0	0	0
Totals ...	21	0	2	0	95·23

SUMMARY OF HOSPITAL AND DISPENSARY RETURN.

	In-patients.	Out-patients.
Europeans	No European hospital	7
Natives, including W.A.F.F. and Civil Police	53	1,291
Totals	53	1,298

SURGICAL OPERATIONS, nil.

ADDAH.

European Mortality and Invaliding Rates, 1910.

Total strength.		Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials ...	16	0	0	0	0
Non-officials ...	8	0	0	0	0
Totals ...	24	0	0	0	0

Summary of Hospital and Dispensary Return.

	In-patients.	Out-patients.
Europeans	4	10
Natives, including W.A.F.F. and Civil Police	21	1,086
Totals	25	1,096

Several Minor Surgical Operations.

European Mortality and Invaliding Rates, 1909.

Total strength.		Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials ...	16	0	0	0	0
Non-officials ...	11	0	0	0	0
Totals ...	27	0	0	0	0

Summary of Hospital and Dispensary Return.

	In-patients.	Out-patients.
Europeans	No European hospital.	6
Natives, including W.A.F.F. and Civil Police	29	1,129
Totals	29	1,135

Surgical Operations, 3, and several minor.

AKUSE.

EUROPEAN MORTALITY AND INVALIDING RATES, 1910.

Total strength.		Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials ...	13	0	0	0	0
Non-officials ...	29	1	2	34·48	68·96
Totals ...	42	1	2	23·80	47·61

SUMMARY OF HOSPITAL AND DISPENSARY RETURN.

	In-patients.	Out-patients.
Europeans	No European hospital.	4
Natives, including W.A.F.F. and Civil Police	26	775
Totals	26	779

SURGICAL OPERATIONS, 38.

EUROPEAN MORTALITY AND INVALIDING RATES, 1909.

Total strength.		Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials ...	21	0	0	0	0
Non-officials ...	67	1	3	14·9	44·76
Totals ...	88	1	3	11·47	34·09

SUMMARY OF HOSPITAL AND DISPENSARY RETURN.

	In-patients.	Out-patients.
Europeans	No European hospital.	26
Natives, including W.A.F.F. and Civil Police	68	843
Totals	68	869

SURGICAL OPERATIONS, 25.

W. H. LANGLEY,
Principal Medical Officer.

ACCRA,
15*th June*, 1911.

APPENDIX I.

ACCRA.

METEOROLOGICAL RETURN FOR THE YEAR 1910.

MONTH.	TEMPERATURE.						RAINFALL.		WIND.		REMARKS.
	Solar Maximum.	Minimum on Grass.	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in Inches.	Degree of Humidity.	General Direction.	Average Force.	
January ...	146·54	75·74	85·87	62·09	23·77	73·98	...	75·00	S.W.	33·92	
February ...	141·85	76·46	86·57	63·42	23·14	74·99	3·10	88·67	,,	33·47	
March ...	142·77	74·03	86·25	66·61	19·64	76·43	·90	92·58	,,	27·57	
April	146·93	75·66	85·86	61·03	24·83	73·44	2·11	87·60	,,	33·77	
May	148·00	72·58	85·25	62·67	22·58	73·96	4·14	95·00	,,	32·89	
June	151·16	70·46	84·33	65·66	18·67	74·99	18·58	84·70	,,	31·12	
July	148·96	75·74	84·25	62·58	21·90	73·41	3·22	88·32	,,	51·11	
August ...	149·25	76·64	81·93	62·67	19·25	72·30	2·43	72·00	,,	35·81	
September ...	153·33	76·66	86·00	62·00	24·00	74·00	·35	79·66	,,	34·83	
October ...	152·16	78·00	87·06	65·06	22·00	76·06	2·43	72·99	,,	70·47	
November ...	146·10	72·66	87·26	68·83	18·43	78·04	1·60	71·20	,,	113·31	
December ...	143·87	72·61	87·16	71·19	15·96	79·17	·66	74·48	,,	111·97	
Totals ...	1770·92	897·24	1027·79	773·81	254·17	900·77	39·52	982·20	S.W.	610·24	
Means ...	147·57	74·77	85·64	64·48	21·18	75·06	...	81·85	,,	50·85	

ABURI.

METEOROLOGICAL RETURN FOR THE YEAR 1910.

MONTH.	TEMPERATURE.						RAINFALL.		WIND.		REMARKS
	Solar Maximum.	Minimum on Grass.	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in Inches.	Degree of Humidity.	General Direction.	Average Force.	
January ...	147·77	64·93	86·96	68·51	18·45	77·73	...	87·67	...	...	
February ...	149·32	64·10	83·27	68·03	15·25	75·65	2·08	87·10	...	...	
March ...	149·00	65·60	84·87	68·58	16·29	76·72	1·83	88·74	...	...	
April	149·16	...	86·00	68·33	17·66	77·16	3·45	86·36	...	...	
May	150·58	68·48	86·70	69·90	16·80	78·30	5·94	87·70	...	...	
June	142·20	67·73	84·23	67·63	16·60	75·93	8·29	85·66	...	...	
July	137·61	66·77	82·77	67·41	15·35	75·09	6·47	86·51	...	...	
August ...	137·32	66·77	80·61	66·61	14·00	73·61	4·05	87·70	...	...	
September ...	146·76	65·83	84·16	67·20	16·96	75·68	2·44	87·70	...	...	
October ...	148·45	67·09	83·36	67·45	15·90	75·40	3·54	88·64	...	...	
November ...	147·93	65·23	85·26	68·26	17·00	76·76	3·37	87·70	...	...	
December ...	147·67	66·93	85·54	70·29	15·25	77·91	1·21	86·87	...	...	
Totals ...	1753·77	729·46	1013·73	818·20	195·51	915·94	42·67	1048·35	...	...	
Means ...	146·14	66·31	84·47	68·18	16·29	76·32	...	87·36	...	...	

QUITTAH.

Meteorological Return for the Year 1910.

Month.	Temperature.						Rainfall.		Wind.		Remarks.
	Solar Maximum.	Minimum on Grass.	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in Inches.	Degree of Humidity.	General Direction.	Average Force.	
January ...	129·00	62·32	87·41	68·90	18·70	78·15	...	73·00	...	...	
February ...	137·07	62·85	90·71	73·03	17·67	81·87	1·63	79·82	...	...	
March ...	138·74	59·80	90·77	72·19	18·58	81·48	·10	72·12	...	...	
April	144·50	55·46	91·00	71·03	19·96	81·01	·77	71·10	...	...	
May	140·64	53·35	88·86	70·77	18·09	79 81	6·48	79·90	...	...	
June	141·23	43·76	86·13	68·43	16·70	77·28	15·93	86·26	...	...	
July	136·67	53·64	86·96	71 25	15·70	79·10	4·06	79·67	...	...	
August ...	139·06	51·38	82·54	67·58	14·96	75·06	2 87	80·03	...	...	
September ...	144·23	58·20	84·36	68·73	15·63	76·54	·83	76·06	...	...	
October ...	143·74	73·16	85·61	73 29	12·32	79·45	6·40	75·80	...	...	
November ...	142·06	75·56	87 76	76·40	11·36	82·08	1·44	53·06	...	...	
December ...	136·64	74·74	87·25	76·74	10·51	81·99	·10	83·87	...	...	
Totals ...	1673·58	724·22	1049·36	858·34	190·18	953·82	40·61	910·69	...	...	
Means ...	139·46	60·35	87·44	71 52	15·84	79·48	...	75·89	...	...	

CAPE COAST.

Meteorological Return for the Year 1910.

Month.	Temperature.						Rainfall.		Wind.		Remarks.
	Solar Maximum.	Minimum on Grass.	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in Inches.	Degree of Humidity.	General Direction.	Average Force.	
January ...	135·67	42·19	85·41	71·91	13·51	78·66	·65	79·61	...	...	
February ...	142·39	40·00	88·78	72·92	15·85	80·85	·32	81·92	...	...	
March ...	147·22	66·12	89·83	73·51	16·32	81·67	·92	80·96	...	...	
April	144·70	70·16	88·20	72·76	15·43	80·48	3·18	87 96	...	...	
May	145·41	70·64	87·80	72·96	14·83	80·38	1·73	88·67	...	...	
June	141·00	67·30	85·86	72·00	13·86	78·93	9·34	86·30	...	...	
July	142·87	63·41	83·38	71·22	12·16	77·30	4·86	86·54	...	...	
August ..	145·54	61·87	82·83	66·58	16·25	74·70	1·70	83 03	...	...	
September ...	147·10	62·06	82·96	70·76	12·20	76·86	1·12	83·36	...	...	
October ...	147·25	62·41	85·09	71·29	13·80	78·19	1·21	85·12	...	...	
November ...	143·76	60·66	86·36	72·06	14·30	79·21	·93	85·56	...	...	
December ...	145·54	56·29	86 90	73 35	13·55	80·12	·03	88·12	...	...	
Totals ...	1728·45	723·11	1033·40	861·32	172·06	947·35	25·99	1017·15	...	...	
Means ...	144·03	60·25	86·11	71·77	14 33	78·94	...	84 76	...	...	

SECCONDEE.

Meteorological Return for the Year 1910.

Month.	Temperature.						Rainfall.		Wind.		Remarks.
	Solar Maximum.	Minimum on Grass.	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in Inches.	Degree of Humidity.	General Direction.	Average Force.	
January ...	128·19	69·38	87·54	69·35	18·19	78·44	...	55 96	...	...	
February ...	133·92	71·60	90·03	72·57	17·46	81·30	·71	56 53	...	...	
March ...	136·54	69·67	91·87	72·74	19·12	82·30	·57	54·58	...	...	
April	142·20	65·30	90·93	72·53	18·40	81·73	3·21	54·46	...	...	
May	134·41	64·64	91·22	72·83	18·38	82·02	4·40	55·67	...	...	
June	132·03	70·90	87·80	72·20	15·60	80·00	11·84	57·73	...	...	
July	132·16	67·06	85·83	71·09	15·00	78·46	8·64	56·16	...	...	
August ...	129·22	66·12	82·64	69·74	12·58	76·19	3·49	56·48	...	...	
September ...	130·40	66·03	82·80	70·63	12·16	76·71	2·86	61·28	...		
October ...	134·90	65·12	86·45	70·90	15·54	78·67	3·56	65·25	...	...	
November ...	...	65·23	89·53	72·10	17·43	80·81	·94	66·32	...	...	
December ...	...	63·09	90·22	71·70	18·51	80·96	·55	55·70	...	...	
Totals ...	1333·97	804·14	1056·86	858·38	198·37	957·59	40·77	696·12	...	...	
Means ...	133·39	67·01	88·07	71·53	16·53	79·79	...	58·01	...	...	

AXIM.

Meteorological Return for the Year 1910.

Month.	Temperature.						Rainfall.		Wind.		Remarks.
	Solar Maximum.	Minimum on Grass.	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in Inches.	Degree of Humidity.	General Direction.	Average Force.	
January ...	147·77	64·93	86·96	68·51	18·45	77·73	...	87·67	...	...	
February ...	133·10	74·71	88·35	67·21	21·14	77·78	1·81	92·10	...	...	
March ...	131·67	74·03	88·38	67·64	20·74	78·01	2·95	91·22	...	...	
April	131·23	73·80	88·00	67·16	20·84	77·58	10·83	84·93	...	...	
May	130·70	73·29	88·00	66·77	21·22	77·38	11·62	90·61	...	...	
June	130·10	71·86	84·70	66·63	18·06	75·66	22·93	90·60	...	...	
July	130·96	72·00	84·12	66·48	17·64	75·30	14·61	92·58	...	...	
August ...	131·06	72·64	83·29	65·61	17·67	74·45	5·33	92·54	...	...	
September ...	130·76	71·70	82·03	65·43	16·60	73·73	5·51	93·36	...	...	
October ...	131·45	72·03	83·09	65·35	17·74	74·22	5·44	92·77	...	...	
November ...	130·43	71·73	85·60	66·46	19·13	76·03	9·64	90·96	...	...	
December ...	131·67	71·83	87·16	66·70	20·45	76·93	·32	90·00	...		
Totals ...	1590·90	864·55	1029·68	799·95	229·68	914·80	90·99	1089·34	...	...	
Means ...	132·57	72·04	85·80	66·66	19·14	76·23	...	90·77	...	...	

TARQUAH.

METEOROLOGICAL RETURN FOR THE YEAR 1910.

MONTH.	TEMPERATURE.						RAINFALL.		WIND.		REMARKS.
	Solar Maximum.	Minimum on Grass.	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in Inches.	Degree of Humidity.	General Direction.	Average Force.	
January ...	136·74	68·83	90·38	68·16	22·22	79·27	1·10	72·87	...	...	
February ...	143·39	73·14	93·96	71·64	22·32	82·80	2·01	78·10	...	...	
March ...	139·48	72·58	94·64	71·48	23·16	83·06	4·50	81·77	...	...	
April	142·90	72·00	94·20	70·83	23·36	82·51	5·29	81·73	...	...	
May	146·67	72·45	94·32	71·35	22·96	82·83	9·73	84·48	...	...	
June	148·73	71·60	89·56	70·20	19·36	79·88	11·65	83·50	...	...	
July	...	70·29	86·48	70·29	16·19	78·38	7·11	83·25	...	...	
August ...	...	71·41	87·16	70·41	16·74	78·78	7·68	85·32	...	...	
September ...	...	71·96	85·96	70·96	15·00	78·46	6·26	85·83	...	...	
October ...	...	71·93	89·12	70·74	18·38	79·93	11·14	86·87	...	...	
November ...	144·26	70·56	91·33	69·36	21·96	80·34	7·02	86·60	...	...	
December ...	137·19	70·51	91·03	69·80	21·22	80·41	5·32	85·87	...	...	
Totals ...	1139·36	857·26	1088·14	845·22	242·87	966·65	78·81	996·19	...	...	
Means ...	142·42	71·43	90·67	70·43	20·23	80·55	...	83·01	...	...	

COOMASSIE.

METEOROLOGICAL RETURN FOR THE YEAR 1910.

MONTH.	TEMPERATURE.						RAINFALL.		WIND.		REMARKS.
	Solar Maximum.	Minimum on Grass.	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in Inches.	Degree of Humidity.	General Direction.	Average Force.	
January ...	136·22	64·03	89·51	60·70	28·80	75·10	...	83·57	...	...	
February ...	143·50	70·07	91·96	53·42	38·53	72·69	1·75	86·67	...	...	
March ...	...	...	...	...	...	...	...	...	...	...	
April	149·63	71·33	92·56	72·46	20·10	82·51	3·91	82·33	...	...	
May	148·96	71·00	89·77	71·87	17·90	80·82	10·86	86·25	...	...	
June	147·33	69·13	87·13	70·40	16·73	78·76	7·43	87·06	...	...	
July	137·61	68·06	82·25	70·16	12·09	76·20	10·00	87·70	...	...	
August ...	139·03	73·74	82·67	72·95	9·90	77·81	12·86	86·41	...	...	
September ...	145·23	78·73	84·73	...	...	...	12·60	89·00	...	...	
October ..	146·58	81·61	85·64	...	...	...	9·52	88·54	...	...	
November ...	142·80	85·03	90·63	...	...	...	1·96	87·43	...	...	
December ...	128·74	80·83	89·67	...	...	...	...	87·03	...	...	
Totals ...	1565·63	813·56	966·52	471·96	144·05	543·89	70·89	951·99	...	...	
Means ...	142·33	73·96	87·86	67·42	20·57	77·69	...	87·45	...	...	

KINTAMPO.

Meteorological Return for the Year 1910.

Month.	Temperature.						Rainfall.		Wind.		Remarks.
	Solar Maximum.	Minimum on Grass.	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in Inches.	Degree of Humidity.	General Direction.	Average Force.	
January ...	135·87	...	90·25	67·06	23·17	78·65	...	58·19	...	...	
February ...	144·35	...	92·92	70·17	22·75	81·54	2·26	58·17	...	...	
March ...	153·16	...	94·67	71·80	22·87	83·23	1·96	54·29	...	...	
April	154·46	...	92·46	71·53	20·93	81·99	4·69	69·10	...	...	
May	155·29	...	91·09	70·58	20·51	80·83	6·68	72·74	...	...	
June	152·83	...	87·73	68·53	19·20	78·13	6·48	73·50	...	...	
July	153·41	...	84·12	68·09	16·03	76·10	10·18	80·93	...	...	
August ...	155·12	...	84·00	68·51	15·48	76·25	7·38	81·40	...	...	
September ...	140·53	...	85·16	68·26	16·90	76·71	21·03	79·90	...	...	
October ...	158·83	...	88·58	67·93	20·64	78·25	11·07	76·84	...	...	
November ...	154·10	...	90·13	68·40	21·73	79·26	·13	70·20	...	...	
December ...	141·35	63·61	90·58	65·48	25·10	78·03	·41	63·88	...	...	
Totals ...	1799·30	63·61	1071·69	826·34	245·31	948·97	72·27	839·14	...	...	
Means ...	149·94	63·61	89·30	68·86	20·44	79·08	...	69·92	...	...	

SUNYANI.

Meteorological Return for the Year 1910.

Month.	Temperature.						Rainfall.		Wind.		Remarks.
	Solar Maximum.	Minimum on Grass.	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in Inches.	Degree of Humidity.	General Direction.	Average Force.	
January ...	125·77	59·83	89·48	65·93	23·54	77·70	...	84·22	...	...	
February ...	139·78	71·07	92·57	70·25	22·32	81·41	1·78	92·17	...	...	
March ...	141·16	64·58	94·54	70·74	23·80	82·64	2·49	91·35	...	...	
April	146·20	64·56	94·10	70·86	23·23	82·48	8·17	89·86	...	...	
May	146·96	64·90	93·12	71·41	21·70	82·26	6·10	90·45	...	...	
June	142·10	62·60	89·23	70·43	18·80	79·83	5·64	90·83	...	...	
July	128·32	61·22	83·80	69·54	14·25	76·67	6·72	91·35	...	...	
August ...	129·09	61·74	84·35	69·77	14·58	77·06	13·29	93·09	...	...	
September ...	135·46	61·10	86·70	69·43	17·26	78·06	5·94	88·20	...	...	
October ...	137·00	61·29	88·58	69·61	18·96	79·09	9·47	87·22	...	...	
November ...	136·10	61·80	89·70	70·10	19·60	79·90	·48	83·30	...	...	
December ...	125·80	57·16	89·06	65·96	23·12	77·51	...	80·25	...	...	
Totals ...	1633·74	751·85	1075·23	834·03	241·16	954·61	60·08	1062·29	...	...	
Means ...	136·14	62·65	89·60	69·50	20·09	79·55	...	88·52	...	...	

GAMBAGA.

Meteorological Return for the Year 1910.

Month.	Temperature.						Rainfall.		Wind.		Remarks.
	Solar Maximum.	Minimum on Grass.	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in Inches.	Degree of Humidity.	General Direction.	Average Force.	
January ...	...	...	...	...	...	...	...	...	...	...	
February ...	158·50	68·96	98·89	78·75	20·14	88·82	...	37·82	...	...	
March ...	156·80	71·51	102·83	75·48	27·35	89·15	1·64	43·29	...	...	
April	155·96	73·03	101·66	76·40	25·26	89·03	2·23	54·50	...	...	
May	151·80	72·03	98·96	74·45	24·51	86·70	2·28	61·36	...	...	
June	109·00	70·46	92·66	72·56	20·10	82·61	4·55	64·86	...	...	
July	81·64	68·29	85·45	69·87	15·58	77·66	12·74	80·27	...	...	
August ...	87·06	69·12	84·61	70·45	14·16	77·53	14·23	86·33	...	...	
September ...	104·10	67·83	87·06	69·80	17·26	78·43	10·31	82·73	...	...	
October ...	115·80	66·93	93·74	71·03	22·70	82·38	1·08	69·22	...	...	
November ...	...	...	...	...	...	...	...	...	...	...	
December ...	146·62	62·44	99·27	69·10	30·17	84·18	1·52	39·48	...	...	
Totals ...	1267·28	690·60	945·13	727·89	217·23	836·49	50·58	619·86	...	...	
Means ...	126·72	69·06	94·51	72·78	21·72	83·64	...	61·98	...	...	

TAMALE.

Meteorological Return for the Year 1910.

Month.	Temperature.						Rainfall.		Wind.		Remarks.
	Solar Maximum.	Minimum on Grass.	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in Inches.	Degree of Humidity.	General Direction.	Average Force.	
January ...	139·25	...	96·35	55·74	40·61	76·04	...	31·03	...	...	
February ...	152·39	...	102·57	61·75	40·82	82·16	·27	36·78	...	...	
March ...	152·22	...	103·96	65·48	38·48	84·72	1·17	38·90	...	...	
April	146·50	58·33	100·56	64·20	36·36	82·38	5·77	57·80	...	...	
May	147·83	...	97·80	63·22	34·58	80·51	2·37	57·06	...	...	
June	143·03	...	93·00	60·36	32·63	76·68	6·07	62·56	...	...	
July	135·87	...	87·41	57·64	29·77	72·52	9·19	73·35	...	...	
August ...	136·54	...	86·96	58·25	28·70	72·60	8·45	80·80	...	...	
September ...	143·23	...	89·23	57·13	32·10	73·18	11·34	75·46	...	...	
October ...	152·61	...	94·58	59·41	35·16	76·99	1·29	60·29	...	...	
November ...	151·20	...	97·00	57·50	39·50	77·25	...	45·50	...	...	
December ...	146·96	...	96·19	55·25	40·93	75·72	·29	43·90	...	...	
Totals ...	1747·63	58·33	1145·61	715·93	429·64	930·75	46·21	663·43	...	...	
Means ...	145·63	58·33	95·46	59·66	35·80	77·56	...	55·28	...	...	

ADDAH.

METEOROLOGICAL RETURN FOR THE YEAR 1910.

MONTH.	TEMPERATURE.						RAINFALL.		WIND.		REMARKS.
	Solar Maximum.	Minimum on Grass.	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in Inches.	Degree of Humidity.	General Direction.	Average Force.	
January ...	145·96	76·19	82·74	73·87	8·87	78·30	...	97·12	...	...	
February ...	146·21	76·57	84·53	76·25	8·28	80·39	·45	88·28	...	...	
March ...	150·51	76·58	86·45	78·03	8·41	82·24	3·20	91·35	...	...	
April	149·00	71·63	85·60	77·10	8·50	81·35	6·96	94·96	...	...	
May	154·48	71·10	86·64	78·06	8·58	82·35	7·60	93·00	...	...	
June	144·80	64·60	85·16	76·50	8·66	80·83	24·71	94·46	...	...	
July	147·67	66·61	82·16	73·61	8·54	77·88	1·80	94·16	...	...	
August ...	142·80	64·00	79·90	73·00	6·90	76·45	·84	94·00	...	...	
September ...	150·40	64·93	79·60	73·33	6·26	76·46	1·28	94·03	...	...	
October ...	181·58	65·45	82·61	75·03	7·58	78·82	4·35	94·77	...	...	
November ...	148·76	69·36	84·80	77·46	7·33	81·13	1·13	95·00	...	...	
December ...	140·38	79·51	86·00	76·12	9·87	81·06	...	95·00	...	...	
Totals ...	1802·55	846·53	1006·19	908·36	97·78	957·26	52·32	1126·13	...	...	
Means ...	150·21	70·54	83·84	75·69	8·14	79·77	...	93·84	...	...	

APPENDIX II.

MEDICAL REPORT OF COOMASSIE FOR THE YEAR ENDING 31st DECEMBER, 1910, AND THE PROVINCE OF ASHANTI.

1. The health of the Europeans stationed in Ashanti during the year has been good.

2. The following is the list of officers who have been doing medical and sanitary duties in Coomassie, and outstations in the Province:—

At Coomassie:—

Dr. Rutherford	Provincial Medical Officer.
Dr. Tichborne	Senior Medical Officer.
Dr. Hunter	Senior Medical Officer.
Dr. Collier	Medical Officer.
Dr. Langley Hunt	Medical Officer.
Dr. Atkinson	Medical Officer.
Dr. Brabazon	Medical Officer.

At Obuasi:—

Dr. Simmonds	Medical Officer.
Dr. Goodbrand	Medical Officer.

At Kintampo:—

Dr. O'Brien	Medical Officer.
Dr. Carter	Medical Officer.

At Sunyani:—

Dr. Wade	Medical Officer.
Dr. d'Amico	Medical Officer.

At British Krachi:—

Dr. Keigwin, on special duty, investigating sleeping sickness. Also Dr. Kinghorn, who travelled throughout the province on the same duty, and made a valuable and lengthy report on the subject, which is already in the hands of the Principal Medical Officer, Accra.

3. During the year 128 Europeans were resident in Coomassie.

Of these:—

81 were Government Officials.
42 Merchants.
3 Missionaries.
1 Wife of Official.
1 Wife of Missionary.

The total number of Europeans on the Sick List amounted to 75.

There was one death of a non-official European, from Blackwater fever, who was brought in to Coomassie from a mine in a moribund condition, and three were invalided.

TABLE OF INVALIDING.

Description.	Residence.	Disease.	Invalided to
1 Official	Coomassie	Remittent Fever ...	England.
1 Official	Coomassie	Remittent Fever ...	Canary Islands.
1 Non-official	Coomassie	Malaria neurasthenia ...	England.

The invaliding rate per thousand works out at :—

European Officials	24·69.
European Non-Officials . . .	21·27.

Table of diseases from which Europeans suffered in Coomassie :—

Remittent Fever	4
Intermittent ,,	37
Blackwater ,,	1
Bilious ,,	4
Abscess	1
Ulcers	4
Buboes	1
Eczema	1
Debility	2
Periostitis	1
Enteric Fever	1
Gastritis	3
Phthisis	1
Diarrhœa	1
Wound	1
Enteritis	1
Tonsilitis	2
Sprain	1
Dislocation	1
Synovitis	1
Dysentery	2
Hepatitis	3
Cystitis	1
	75

5. During the year 23 non-officials were attended to.

6. The health of the troops during the Camp of Exercise held in the early part of the year was good; four officers only suffered from minor complaints.

THE EUROPEAN HOSPITAL.

7. The European Hospital has been kept in an efficient state throughout the year, and has been much appreciated by patients, who formerly had to be treated in their own houses in any illness There were three different Nursing Sisters in charge during the year :—Miss Oram, Miss Hornsby and Miss Adair. One of the Wards of the Hospital is at present utilized as quarters for the Nursing Sister.

The patients consisted of 31 officials and 21 non-officials.

Table of Diseases of those admitted to the European Hospital :—

Intermittent Fever	36
Abscess	1
Ulcers	3
Debility	2
Enteric Fever	1
Circumcision	1
Gastritis	3
Phthisis	1
Dysentery	2
Blackwater Fever	1
Ptomaine Poisoning	1
	52

The average period spent in hospital was six days.

NATIVE OFFICIALS.

8. The health of the native staff was most satisfactory throughout the year. One clerk was invalided, and no deaths occurred.

9. Drs. Brabazon, Atkinson and Hunt have been in immediate charge of the native hospital during the year. The large majority of those who attend for treatment are soldiers from the regiment suffering from ulcers of the feet and legs, although there is a gradual increase of natives from the surrounding villages as compared with former years. Much good work has been accomplished.

Admissions for the year . . .	838
Deaths	40

New Cases attended to at the out-patient department:—

Soldiers . . .	3,359		
Civil Police . .	167		
Civilians . .	4,055	Total	7,581

Old Cases:—

Soldiers . . .	16,339		
Police . . .	574		
Civilians . . .	13,483	Total	30,396
		Grand Total	37,977

PRISON.

10. The health of the prisoners has been very fair; there was one death from Bronchitis. There were 63 cases under treatment in the infirmary; the prevailing diseases being Febricula, Diarrhœa, Rheumatism, Bronchitis and Abscess. The yard and the cells were kept in a clean and good sanitary state. The food of the prisoners was inspected at different times, and found to be satisfactory.

SLEEPING SICKNESS.

11. There were between 80 and 90 known cases of sleeping sickness in the Province, and an average of 15 have been under treatment with Atoxyl injections at Coomassie, the subjects attend weekly at the hospital for this. No deleterious effects on the sight have been observed or complained of, although complaint is made of the pain at the seat of injection lasting for a number of days. A small isolation hospital for this disease is in course of erection, and will be ready for occupation in a month or two.

SMALL-POX.

12. This disease has been prevalent throughout the year at many places in the Province; no doubt a good deal of it is due to the native habit of inoculating direct from persons suffering from small-pox to healthy people, with the idea that the disease is produced in a mild form; but whether this is so or not it is difficult to say, as the chiefs or their people will give no information as to mortality, but the custom, no doubt, keeps the disease alive.

During the year there were 37 admissions to the segregation camp, of whom 11 died. Vaccination with lymph from Europe has been carried on as much as possible, but the people do not show anxiety, or readiness, to have it done; there have been 2,881 successful vaccinations done in Coomassie during the year.

NATIVE STAFF.

13. Instruction has been given to the hospital pupils, and junior staff, by the Medical Officers and Nursing Sister in hygiene, dressing of wounds and other hospital duties; also, first aid and stretcher drill, to contingents of soldiers, by the Medical Officers.

SANITATION.

14. The Sanitation of the town of Coomassie has been well looked after with a staff of about 70 scavengers in daily employment. There are now five incinerators in constant operation, burning the sweepings and rubbish of the town, and three for the regimental lines, and the cleanliness of both town and cantonment may be considered satisfactory. The burnt refuse, from the incinerators, is being used to fill in the swamps below the town.

Few mosquitoes are observed in the town or cantonments, but constant supervision is required to prevent the people keeping water standing in barrels or pots in their houses. The visitation of houses during the month of December revealed the presence of larvæ in a little over two per cent. Between 30 and 40 cesspits have been found to be in existence in the premises of different people in Coomassie, and which are now being abolished.

Return showing number of prosecutions made in the Sanitary Department at Coomassie during the year 1910 :—

Month.	No. of Prosecutions.	No. of Convictions.	Fines collected.			No. imprisoned.
			£	s.	d.	
January	—	—		—		Nil.
February	62	61	23	13	—	Nil.
March		—		—		Nil.
April	32	32	19	5	—	Nil.
May	55	55	8	17	—	Nil.
June	57	57	15	2	—	Nil.
July	14	14	3	13	6	Nil.
August	47	47	18	5	—	Nil.
September	46	46	14	10	—	Nil.
October	3	3	—	12	—	Nil.
November	56	56	13	—	6	Nil.
December	59	58	18	15	—	Nil.
	431	429	£135	13	—	

WATER SUPPLY.

15. The water supply is abundant and good. During the year 11 wells have been covered and cased with cement, and hand pumps fitted on to them.

DRAINS.

16. A number of surface street drains have been completed, and as funds permit these will be gradually extended ; but a lot of work is still necessary in this direction in the town.

SLAUGHTER-HOUSE.

17. Owing to the population of the town being much increased of late, the present slaughter-house is too small to meet requirements now, and it is under consideration to have it enlarged.

Statement showing number of cattle slaughtered in Coomassie Slaughter-house during the year 1910 :—

Month.	For				Amount of Fees.		
	Cows.	Sheep.	Goats.	Pigs.	£	s.	d.
January	239	59	200	15	42	14	—
February	242	118	196	18	44	12	—
March	343	136	240	13	61	3	6
April	309	145	240	10	56	4	6
May	337	163	356	18	63	19	6
June	358	146	297	10	65	—	6
July	297	112	415	13	58	1	—
August	360	89	416	13	66	19	—
September	310	86	207	20	54	6	6
October	208	28	129	28	35	16	6
November	318	72	86	21	52	3	6
December	338	68	248	14	58	19	—
	3659	1222	3030	193	£659	19	6

GARDEN.

18. The vegetable garden has been most productive, and the produce much appreciated by the white officials ; it no doubt contributes to the good health enjoyed by the Europeans stationed here.

METEOROLOGICAL.

19. The rainfall for 1910 was exceptionally heavy, 70·89 inches fell, as compared with 55·74 in 1909.

(Signed) C. B. HUNTER, S.M.O.,
Acting Provincial Medical Officer.

APPENDIX III.

MEDICAL REPORT ON THE NORTHERN TERRITORIES FOR THE YEAR ENDED 31st DECEMBER, 1910.

Out of a daily average European population of 22·37 (34) thirty-four were placed on the Sick List. (1) One invalided and (1) one death occurred; this is a great improvement on the health of the previous year, in which 50·99 officials were placed on the Sick List from all causes; (3) three invalided and (3) three deaths took place out of an average daily population of 22·62.

The following table shows the comparative health of the stations in the Northern Territories and include all officials placed on the Sick List.

Station.	Average daily strength.	Number placed on Sick List.	Average Number of days on Sick List.	Invalided.	Died.
Tamale	6·09	13	7·30	—	—
Gambaga	3·69	2	8·00	—	—
Bawku	1·08	—	—	—	—
Zouaragu	3·00	8	7·00	—	1
Navarro	·53	—	—	—	—
Lorha	1·29	—	—	—	—
Wa	2·28	3	27·33	1	—
Bole	1·89	1	7·00	—	—
Salaga	2·52	7	2·83	—	—
Totals	22·37	34	59·46	1	1

I also attach prevalent Diseases from which Europeans suffered :—

Abscess	1
Colitis	1
Chronic Diarrhœa	1
Debility	1
Accident (knocked down by Bull)	1
Bilious Remittent Fever	1
Black-water Fever	1
Boils	1
Acute Dysentery	1
Acute Orchitis	1
Enteritis	2
Hepatic Congestion	2
Injury to foot	1
Lymphangitis	1
Obscure Abdominal Inflammatory Condition	1
Paresis of Wrist (result of injury)	1
Ptomaine Poisoning	1
Remittent Malaria	11
„ „ and congestion of Liver	1
Tape Worm	1
Thecal Abscess	1
Wound of Foot	1
Total	34

NON-OFFICIAL EUROPEANS.

One Catholic Father died at Navarro from Blackwater Fever. This Missionary had been in the country for over (5) five years. With this exception the health of the European non-officials was satisfactory.

NATIVE OFFICIALS.

The average daily number of the Government clerks throughout the Protectorate averaged 50·23; and out of this total (23) twenty-three were placed on the sick list; (3) three were invalided, and no deaths took place.

Cause of invaliding was as follows :—

Peripheral Neuritis	1
Orbital Tumour	1
Enteritis of Hæmogregarine origin . . .	1
Total	3

The average number of days spent on the Sick List shows a large increase on last year, this being caused by the length of time some of the patients had to remain in the Northern Territories before it was considered advisable to allow them to undergo the long journey to the coast.

NATIVE TROOPS.

The company of the Gold Coast Regiment was transferred early in the year to the new Headquarters of the North-Eastern Province; and since their arrival at that station, the health amongst all ranks has been excellent. Out of a daily average of 140·46, there was no invaliding, and no deaths occurred.

NORTHERN TERRITORIES CONSTABULARY.

Detachments of this Force were stationed at nine different points throughout the Protectorate, and from all stations satisfactory health reports have been received. During the year (5) five men were invalided and (3) three deaths took place. When it is considered, the duties these men perform in all weathers, these figures are low. No epidemic occurred amongst Constabulary or I Company of the Gold Coast Regiment, stationed in the Northern Territories.

	I Company Gold Coast Regiment.				Northern Territories Constabulary.			
Months.	Strength.	Average daily number on the Sick List.	Invalided.	Died.	Strength.	Average daily number on the Sick List.	Invalided.	Died.
Jan.	169·16	8·00			245·56	12·27	...	...
Feb.	163·89	1·85			260·91	10·24	...	1
Mar.	45·00	4·00			254·11	11·15	1	1
Apr.	25·00	1·66			232·12	9·96	1	...
May	143·20	3·56			262·85	16·57	...	...
June	168·00	5·16			273·42	17·31	...	...
July	168 00	8·85			277·20	14·43	2	...
Aug.	160·30	5·04			280·83	10·83	1	1
Sept.	160·50	4·49			276·52	10·89	...	...
Oct.	160·60	3·00			258·47	6·21	...	...
Nov.	160·90	6·43			245·39	11·42	...	...
Dec.	161·00	10·83			237·65	9·45	...	...

TOWNS PEOPLE.

No serious epidemic occurred amongst the natives of this country during the year Slight outbreaks of small-pox took place in several districts, but were easily dealt with, as the inhabitants now raise very little objection to have the infected ones isolated; and in several cases it was done without any instruction being given.

In some districts it is the custom, when a case of small-pox arises in a village, for the Chief or Headman to inoculate all adults; and sometimes the inhabitants of a neighbouring village will visit an infected one, for the purpose of having all the people inoculated. In this way the disease is kept up in the outlying districts.

CEREBRO-SPINAL MENINGITIS.

No case of this disease was recorded during the year.

TRYPANOSOMIASIS.

Dr. Beringer, in his report on a tour through a certain portion of the Southern Province, reported several cases of Sleeping Sickness. Throughout the rest of the Protectorate (3) three cases were under treatment, all of which ended fatally.

METEOROLOGICAL.

The rainfall was about the average, 46·21 inches; and except that the Harmattan set in earlier than usual in the first week of October there is nothing particular to remark about the Meteorological conditions of the year 1910. Following is the rainfall for the last (3) three years.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
1908	—	—	·94	2.88	6·94	8·36	4·94	4 51	7·23	3·50	—	—	39·30
1909	2·00	·44	2·23	6·12	4·54	7·69	7·07	7·91	5·67	7·50	32	·09	51·58
1910	—	·27	1·17	5·77	2·37	6·07	9·19	8·45	11·34	1·29	—	·29	46·21

GARDENS.

The supply of vegetables in all the gardens has been well up to the average. The following articles were procurable during most of the year:—Tomatoes, Carrots, Lettuce, French beans and Radishes.

WATER.

The water supply at all stations throughout the Northern Territories has undergone improvement, wells being sunk at most of the stations from which a good supply of pure water is obtained.

SANITATION.

The Sanitation of the Headquarter stations and villages in the immediate neighbourhood of same are kept in good order. This is only accomplished by constant supervision; and, if relaxed for any length of time, the people soon return to their filthy habits.

STAFF.

During the year the following number of the West African Medical Staff did duty in the Northern Territories:—Dr. E. H. Tweedy, Provincial Medical Officer, Dr. H. B. S. Montgomery, Senior Medical Officer, Drs. P. M. Tobit, W. S. Webb, H. T. Palmer, F. H. Storey, A. Lundie, F. J. A. Beringer, G. E. H. Le Fanu, A. B. Tighe, F. S. Harper, and R. Mugliston.

Natives:—Mr. F. W. Cochrane Wulff, Storekeeper, Mr. J. R. Lamptey, 2nd Class Dispenser, Mr. T. P. Bartels, Mr. C. B. Botchey, Mr. T. Asino, 1st Class Dressers; Mr. F. Quarcoo, Mr. J. Q. Awuku, 2nd Class Dressers; Mr. C. F. McCarthy and Mr. J. W. Berko, 3rd Class Dressers.

(Sgd.) H. TWEEDY,
Provincial Medical Officer.

APPENDIX IV.

RETURN OF DISEASES AND DEATHS IN 1910.

DISEASES.	GOLD COAST COLONY.					ASHANTI.					NORTHERN TERRITORIES.					Total cases treated.	Total Deaths.	Remarks.
	Remaining in Hospital at end of 1909.	Hospital Admissions.	Extern.	Deaths.	Remaining in Hospital at end of 1910.	Remaining in Hospital at end of 1909.	Hospital Admissions.	Extern.	Deaths.	Remain ing in Hospital at end of 1910.	Remaining in Hospital at end of 1909.	Hospital admissions.	Extern.	Deaths.	Remaining in Hospital at end of 1910.			
1. GENERAL DISEASES:—																		
Small Pox	...	2	6	...	...	8	130	...	38	1	1	16	2	5	...	165	43	
Measles	...	9	26	1	...	...	...	...	...	...	...	...	...	...	...	35	1	
Mumps	...	1	22	...	...	...	...	...	...	...	...	...	4	...	...	27	...	
Chicken Pox	...	36	20	...	1	...	2	3	...	...	1	2	...	...	...	64	...	
Vaccinia	...	1	9	...	..	...	...	...	...	...	...	...	12	...	...	22	...	
Febricula	...	7	91	...	...	...	30	210	...	...	...	...	10	...	...	348	...	
Influenza	...	1	5	...	...	...	...	...	...	...	...	...	...	...	...	6	...	
Enteric Fever	...	2	...	1	...	...	...	...	...	...	...	...	...	...	...	2	1	
Dysentery	3	73	317	21	2	...	7	45	...	...	...	10	25	4	...	480	25	
Rickets	...	...	1	...	...	...	...	...	...	...	...	..	...	...	...	1	...	
Yellow Fever	...	11	...	10	...	...	...	...	...	...	...	...	...	...	...	11	10	
Scarlet ,,	...	...	1	...	...	...	...	...	...	...	..	...	...	...	...	1	...	
Malarial Cachexia	...	3	4	...	...	...	...	...	...	..	...	...	...	...	...	7	...	
MALARIAL FEVER:—																		
(a) Intermittent Quotidian	...	...	...	...	...	...	18	...	...	1	.	...	...	...	...	18	...	
Tertian	...	4	...	...	...	...	16	...	...	...	...	...	...	...	...	20	...	
Irregular	1	7	...	...	...	...	10	...	1	...	...	...	...	...	...	18	1	
Type undiagnosed	...	82	865	3	1	...	25	203	...	...	...	7	109	...	...	1291	3	
(b) Remittent	3	191	866	3	3	...	92	221	3	...	1	5	33	1	...	1412	7	
(c) Hæmoglobinuric Fever	...	20	...	5	1	...	...	...	...	...	...	...	...	...	...	20	5	
Beri-Beri	3	20	15	6	1	...	...	...	...	...	...	...	...	...	...	38	6	
Erysipelas	...	2	4	...	1	...	2	2	...	...	...	...	...	...	...	10	...	
Septicæmia	...	6	10	2	...	...	...	...	...	...	...	1	...	1	...	17	3	
Pyæmia	...	2	...	2	...	...	...	...	...	...	...	...	...	...	...	2	2	
Tetanus	...	6	...	4	...	...	...	...	...	...	...	...	...	...	...	6	4	
Tubercle	..	18	7	9	...	...	3	2	...	...	...	...	...	...	...	30	9	
Yaws	...	2	245	...	...	1	4	239	...	...	...	...	17	...	...	508	...	
Leprosy (Anaesthetic)	...	2	25	...	1	...	...	1	...	...	...	...	12	...	...	40	...	
Syphilis (a) Primary	1	3	92	...	2	...	1	21	...	...	...	...	6	...	...	124	...	
(b) Secondary	...	5	128	1	...	...	...	67	...	...	...	2	53	...	...	255	1	
(c) Inherited	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Gonorrhœa	...	13	322	1	...	...	12	251	...	...	...	2	21	...	...	621	1	
Alcholism	...	10	5	...	...	...	2	...	1	...	...	...	...	...	...	17	1	
Post Alcoholic Debility	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	
Rheumatism	...	22	840	1	...	1	32	353	1	...	...	5	177	...	...	1,430	2	
Rheumatic Fever	...	5	363	1	...	...	5	241	...	...	...	...	...	...	...	614	1	
Gout	...	...	9	...	...	...	...	...	...	...	...	...	...	...	...	9	...	
Carried forward	11	567	4,298	71	13	10	391	1,859	44	2	3	50	481	11	—	7,670	126	

Return of Diseases and Deaths in 1910—*continued.*

DISEASES.	GOLD COAST COLONY.					ASHANTI.					NORTHERN TERRITORIES.					Total Cases Treated.	Total Deaths.	Remarks.
	Remaining in Hospital at end of 1909.	Hospital Admissions.	Extern.	Deaths.	Remaining in Hospital at end of 1910.	Remaining in Hospital at end of 1909.	Hospital Admissions.	Extern.	Deaths.	Remaining in Hospital at end of 1910.	Remaining in Hospital at end of 1909.	Hospital Admissions.	Extern.	Deaths.	Remaining in Hospital at end of 1910.			
Brought forward	11	567	4,298	71	13	10	391	1,859	44	2	3	50	481	11	—	7,670	126	
New Growth Malignant	...	4	...	1	...	...	3	...	...	...	...	...	...	...	...	7	1	
,, ,, Non-Malignant ...	1	6	183	...	...	...	1	...	1	...	...	...	3	...	...	194	1	
Anæmia	...	9	163	...	...	...	...	8	...	...	...	...	2	...	...	182	...	
Debility	2	7	274	...	1	...	6	61	3	...	...	1	21	...	...	372	3	
Sleeping Sickness	..	8	...	2	...	...	13	22	6	...	...	9	...	4	1	52	12	
Diabetes Mellitus	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Inanition	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	2	...	
Diseases of the Nerves :—																		
Sub-Section 1. Neuritis	1	4	78	..	3	...	...	...	...	...	...	1	...	...	...	84	...	
Brain & Membrane	...	...	21	...	...	...	...	131	...	...	...	...	...	...	...	152	...	
Meningitis	...	4	...	2	...	...	...	...	...	...	...	...	...	...	...	4	2	
Myelitis	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	
Sclerosis Diseminated ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Spinal Cord	...	...	...	..	...	...	...	...	...	...	...	1	...	...	...	1	...	
Functional Nervous Disorders:—																		
Sub-Section 2. Apoplexy	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1	
Paralysis	...	11	...	5	...	...	...	...	...	...	...	...	...	...	...	11	5	
Epilepsy	...	2	30	1	...	...	4	12	...	...	...	...	...	...	...	48	1	
Neuralgia	...	15	300	...	..	...	7	83	...	...	...	...	19	...	...	424	...	
Hemiplegia	...	2	...	...	1	.	...	...	...	...	...	...	...	...	...	2	...	
Vertigo	...	..	22	...	...	...	...	1	...	...	...	...	1	...	...	24	...	
Migraine	...	...	90	...	...	...	...	15	...	...	...	...	...	...	...	105	...	
Neurasthenia	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	
Paraplegia	...	2	...	1	1	...	...	...	...	...	...	...	...	...	...	2	1	
Hysteria	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	
Mental Diseases :—																		
Sub-Section 3. Idiocy	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Mental Debility	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	
Melancholia	...	1	...	...	...	...	...	...	...	...	...	...	..	...	...	1	...	
Dementia	...	...	1	...	..	...	...	...	...	...	...	...	..	...	...	1	...	
Insanity	...	1	1	...	...	...	2	2	..	..	...	2	...	1	...	8	1	
Hypochondriasis	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	
Diseases of the Eye :—																		
Conjunctivitis	...	4	690	..	...	...	12	119	...	...	...	5	211	...	...	1,041	...	
Cataract	1	...	10	...	...	...	...	4	...	...	...	...	...	...	...	15	...	
Ophthalmia	1	4	195	...	..	...	...	7	.	...	...	...	8	...	...	215	...	
,, Gonorrhœal	...	1	..	...	...	...	...	...	...	...	...	...	...	...	...	1	...	
Carried forward	18	657	6,358	84	19	10	439	2,324	54	2	3	69	746	16	1	10,624	154	

Return of Diseases and Deaths in 1910—*continued.*

DISEASES.	GOLD COAST COLONY.					ASHANTI.					NORTHERN TERRITORIES.					Total Cases Treated.	Total Deaths.	Remarks.
	Remaining in Hospital at end of 1909.	Hospital Admissions.	Extern.	Deaths.	Remaining in Hospital at end of 1910.	Remaining in Hospital at end of 1909.	Hospital Admissions.	Extern.	Deaths.	Remaining in Hospital at end of 1910.	Remaining in Hospital at end of 1909.	Hospital Admissions.	Extern.	Deaths.	Remaining in Hospital at end of 1910.			
Brought forward	18	657	6,358	84	19	10	439	2,324	54	2	3	69	746	16	1	10,624	154	
Keratitis	1	3	128	...	..	...	...	9	...	...	...	...	19	...	...	160	...	
Iritis	...	...	24	...	...	...	6	9	...	...	...	...	32	...	...	71	...	
Staphyloma	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	
Glaucoma	...	1	3	...	...	...	...	...	...	...	...	...	...	...	...	4		
Pterygium	...	1	10	...	.	...	...	...	...	...	...	...	...	...	...	11	...	
Corneal Ulcer	...	...	10	...	...	...	...	...	...	...	...	...	...	...	...	10	...	
Diseases of the Ear :—																		
Otitis	...	...	115	...	...	..	...	28	..	...	...	...	...	...	...	143	...	
Otorrhœa	...	...	348	...	...	...	2	92	...	...	...	2	...	...	...	444	...	
Diseases of the Nose :—																		
Coryza	...	...	36	...	...	...	1	...	...	...	...	...	1	...	...	38	...	
Nasal Catarrh	...	...	36	...	...	...	...	5	...	...	...	...	..	...	...	41	...	
Rhinitis	...	...	25	...	...	...	...	...	...	...	...	...	...	...	...	25	...	
Diseases of the Circulatory System :—																		
(*a*) Heart	1	17	158	3	...	...	1	12	...	...	...	1	2	1	...	192	4	
(*b*) Membranes of Heart	...	5	2	2	...	...	...	..	...	...	...	...	...	...	...	7	2	
(*c*) Valves of Heart	...	2	40	3	...	...	...	...	...	...	...	1	...	1	...	43	4	
(*a*) Blood Vessels	...	7	25	...	...	...	...	...	...	...	...	...	...	...	...	32	...	
Diseases of the Respiratory System :—																		
(*a*) Larynx...	...	...	31	...	...	...	...	...	...	...	...	...	6	...	...	37	...	
(*b*) Trachea and Bronchi ...	2	30	2,560	1	1	2	32	518	2	..	...	3	255	...	...	3,402	3	
(*c*) Lung	2	75	342	32	1	...	22	459	9	...	1	7	19	6	...	927	47	
(*d*) Pleura	...	10	158	2	...	...	9	79	...	...	...	...	10	...	...	266	2	
Whooping Cough	...	...	26	...	...	...	...	...	...	...	...	...	...	...	...	26	...	
Diseases oe the Digestive System :																		
(*a*) Mouth	...	...	358	...	...	...	..	25	...	...	...	...	17	...	...	400	...	
(*b*) Lips	...	...	6	...	...	...	...	13	...	...	...	...	1	...	...	20	...	
(*c*) Jaw and Antrum	...	...	7	...	...	...	...	6	...	...	...	...	1	...	...	14	...	
(*d*) Teeth, Alveola and Gums ...	...	1	713	...	1	...	2	134	...	..	...	...	14	...	...	864	...	
(*e*) Tongue	...	...	29	...	...	...	...	1	...	...	...	...	1	...	...	31	...	
(*f*) Palate and Fauces	...	2	106	...	...	...	...	2	..	...	...	...	4	...	...	114	...	
(*g*) Salivary Glands	...	...	21	...	...	...	...	4	..	...	...	...	...	...	...	25	...	
(*h*) Pharynx and Oesophagus ...	...	3	301	...	...	...	...	12	...	...	...	...	12	...	...	328	...	
(*i*) Stomach	1	23	904	...	...	...	1	111	...	...	...	...	11	...	...	1,051	...	
Carried forward	25	838	12,880	127	22	12	515	3,843	68	2	4	83	1,151	24	1	19,351	216	

Return of Diseases and Deaths in 1910—*continued.*

DISEASES.	GOLD COAST COLONY.					ASHANTI.					NORTHERN TERRITORIES.					Total Cases Treated.	Total Deaths.	Remarks.
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Brought forward ...	25	838	12,880	127	22	12	515	3,843	65	2	4	83	1,151	24	1	19,351	216	
(*j*) Intestines	...	74	2,994	3	1	...	94	1,724	6	...	...	12	603	2	...	5,501	11	
(*k*) Rectum and Anus	...	19	145	1	...	...	1	13	...	...	...	...	5	...	...	183	1	
(*l*) Liver	1	20	63	5	1	...	1	4	1	...	...	...	1	...	...	90	6	
(*m*) Gall Bladder	...	...	7	...	...	...	...	...	...	...	...	...	...	...	...	7	...	
(*n*) Peritoneum	1	4	13	2	...	...	...	...	...	...	...	...	...	...	...	18	2	
Diseases of the Lymphatic System :—																		
(*a*) Spleen	...	5	197	...	...	...	...	1	...	...	...	...	3	...	...	206	...	
(*b*) Lymphatics	1	19	211	...	...	...	21	73	...	...	...	1	27	...	...	353	...	
Thyroid body	...	...	6	...	...	...	...	1	...	...	...	...	...	...	...	7	...	
Enlarged Glands	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	
Supra-Renal Capsules	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Diseases of the Urinary System :																		
(*a*) Kidneys and Ducts	1	10	43	3	...	...	7	10	1	...	...	...	...	...	...	71	4	
(*b*) Urinary Disorders	...	4	51	1	1	...	...	2	...	..	...	...	...	...	...	58	1	
(*c*) Bladder	...	3	31	1	...	...	5	27	1	...	...	1	3	...	...	70	2	
Diseases of the Generative System :—																		
(*a*) Male Organs																		
i. Urethra	1	14	55	1	...	...	2	1	...	...	...	1	...	...	...	74	1	
ii. Prostate Gland	...	2	2	...	...	...	...	4	...	...	...	...	...	...	...	8	...	
iii. Penis	...	11	100	...	...	...	13	24	...	...	...	...	3	...	...	152	...	
iv. Scrotum	...	6	52	1	...	...	5	6	...	...	...	1	...	...	...	69	1	
v. Spermatic Cord	2	...	3	...	...	...	...	...	...	...	...	...	...	...	...	5	...	
vi. Tunica Vaginalis	...	3	6	...	...	...	...	7	...	...	...	...	1	...	...	17	...	
vii. Testicles	...	11	72	...	...	...	5	56	...	...	...	1	10	...	...	155	...	
(*b*) Female Organs																		
i. Ovary	...	...	20	...	...	...	...	...	...	...	...	...	3	...	...	23	...	
ii. Fallopian Tube	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	2	...	
iii. Uterine Ligaments ...	1	1	4	...	...	...	...	...	...	...	...	...	1	...	...	6	...	
iv. Uterus	...	6	64	1	...	...	...	2	...	...	...	...	...	...	...	72	1	
v. Vagina	...	4	35	...	...	...	...	5	...	...	...	..	...	...	...	44	...	
vi. Vulva	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	2	...	
vii. Functional	...	2	...	...	...	...	...	4	...	...	...	1	5	...	...	12	...	
Pregnancy Hæmorrhage	...	2	...	...	...	...	...	...	...	...	...	..	...	...	...	2	...	
Retained Placenta...	...	...	...	...	...	..	1	...	1	...	...	...	...	...	...	1	1	
Abortion	...	1	...	1	...	...	...	...	...	...	...	.	...	...	...	1	1	
Partus	...	1	10	...	...	..	2	...	...	...	...	...	...	...	...	13	...	
Carried forward	33	1063	17,067	147	25	12	672	5,807	75	2	4	101	1,816	26	1	26,575	248	

Return of Diseases and Deaths in 1910—*continued.*

DISEASES.	GOLD COAST COLONY.					ASHANTI.					NORTHERN TERRITORIES.					Total Cases Treated.	Total Deaths.	Remarks.
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Brought forward	33	1,063	17,067	147	25	12	672	5,807	75	2	4	101	1,816	26	1	26,575	248	
BREAST :—																		
(*a*) Male	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	2	...	
(*b*) Female	...	1	48	...	...	...	...	12	...	...	...	...	2	...	...	63	...	
DISEASES OF THE ORGANS OF LOCOMOTION :—																		
(*a*) Bones	2	14	162	...	...	...	...	16	...	...	...	...	6	...	...	200	...	
(*b*) Joints	3	18	184	...	...	...	21	149	...	...	...	7	42	...	...	424	...	
(*c*) Spine	...	1	16	...	...	...	...	...	...	...	...	...	..	...	...	17	...	
(*d*) Muscles	1	4	239	...	...	...	2	20	...	...	...	1	13	...	...	280	...	
(*e*) Tendons and Fasciae	...	3	17	...	...	...	...	1	...	...	...	...	2	...	...	23	...	
(*f*) Bursae and sheaths of Tendons	...	...	48	...	...	...	2	2	...	...	...	1	4	...	...	57	...	
DISEASES OF THE CELLULAR TISSUE :																		
Abscesses	4	32	675	2	...	...	42	434	1	4	...	...	...	...	...	1187	3	
Cellulitis	2	12	349	...	1	...	27	118	...	...	...	3	27	...	...	538	...	
DISEASES OF THE SKIN :																		
Boil	1	11	150	...	1	...	36	117	...	...	.	...	...	...	...	315	...	
Eczema	...	2	166	...	...	...	7	...	...	..	...	...	...	...	...	175	...	
Impetigo	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	
Pemphigus	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	
Psoriasis	...	...	88	...	...	...	...	...	...	...	...	...	...	...	...	88	...	
Ringworm	...	2	130	...	...	...	...	...	...	...	...	...	...	...	...	132	...	
Scabies	...	...	213	...	...	...	17	107	...	...	...	...	...	...	...	337	...	
Ulcer	6	73	2706	2	6	18	202	1764	...	5	2	12	755	...	...	5538	2	
Whitlow	...	1	90	...	...	...	...	40	...	..	...	...	...	...	...	131	...	
INJURIES :—																		
(*a*) General :—																		
i. Lightning Stroke	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	
ii. Sun Stroke	...	2	1	...	...	...	...	...	...	...	...	...	...	...	...	3	...	
(*b*) Local :—																		
i. Head and Face	...	30	376	1	...	...	12	60	1	...	...	1	22	...	...	501	2	
ii. Eye	...	4	238	.	...	..	2	28	...	...	...	...	2	...	...	274	...	
iii. Ear	...	...	131	...	...	...	...	7	...	...	...	...	3	...	...	141	...	
iv. Neck	...	12	89	3	...	...	...	4	...	...	...	...	...	...	...	105	3	
v. Chest...	...	7	61	...	...	...	...	1	...	...	...	...	6	...	...	75	...	
vi. Back	...	6	59	...	...	...	1	12	...	...	...	...	2	...	...	80	...	
vii. Abdomen	...	4	14	1	...	...	1	5	1	...	...	1	1	...	...	26	2	
Carried forward	53	1,305	23,319	156	34	30	1,044	8,704	78	11	6	127	2,703	26	1	37,291	260	

Return of Diseases and Deaths in 1910—*continued.*

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Brought forward	53	1,305	23,319	156	34	30	1,044	8,704	78	11	6	127	2,763	26	1	37,291	260	
viii. Pelvis and Generative Organs	...	3	6	1	...	...	1	3	...	...	...	...	7	...	...	20	1	
ix. Injury Multiple	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1	
x. Upper Extremity	1	53	798	...	...	...	18	684	1	...	...	...	207	...	...	1,761	1	
xi. Lower Extremity	5	85	1,426	2	4	1	88	1,116	1	1	...	6	250	...	...	2,977	3	
Burns	...	3	6	...	...	...	...	...	...	...	...	...	...	...	...	9	...	
Snake Bite	1	1	1	1	...	...	3	...	...	...	...	1	1	...	...	8	1	
Scorpion Sting	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	4	...	
Insect Sting	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	2	...	
Monkey Bite	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	..	
Gunshot Wounds	...	3	...	1	2	...	2	...	1	...	...	...	...	...	...	5	2	
Sprains	...	...	...	...	...	...	10	...	..	...	...	...	...	...	...	10	...	
SURGICAL OPERATIONS:—																		
Amputation of Arm	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	
,, Wrist	...	2	...	...	...	...	...	...	...	...	...	...	..	...	...	2	...	
,, Finger	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	
Circumcision	...	4	...	...	...	...	8	2	...	...	...	...	...	...	...	14	...	
Hæmorrhoids Excision	...	8	1	...	...	...	...	...	...	...	...	...	...	...	...	9	...	
Frontal Empyema	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	
Elephantiasis Prepuce	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	
Epithelioma Prepuce	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	
Ganglion, Removal of	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	
Lipoma	...	8	...	...	...	...	...	...	...	...	...	...	...	...	...	8	...	
Fistula in Ano	...	8	...	...	...	...	..	...	...	...	...	...	...	...	...	8	...	
Partial Prolapse of Rectum ...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	
Sarcoma	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	
Abscess opened	...	...	...	...	...	...	6	54	...	..	...	...	..	...	...	60	...	
Irreducible Hernia	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	
Strangulated Hernia	...	1	1	1	...	...	4	...	...	...	...	...	...	...	...	6	1	
Sequestration	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...	
Excision of Labia Majora . .	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	
Malignant Tumour, Removal of...	...	3	...	...	...	...	...	...	..	...	...	...	...	...	...	3	...	
Ainhum	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	2	...	
Paracentesis Corneal, both Eyes...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	
Extraction of Teeth	..	...	...	...	...	...	3	...	...	...	...	...	...	...	...	3	...	
Deformity, Fingers and Teeth ...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	4	...	
POISONS	...	...	11	...	...	...	...	...	...	...	...	...	...	...	...	11	...	
Quinine Hæmoglobinuria ...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	
Ptomaine	...	2	..	...	...	...	...	...	...	...	...	...	...	...	...	2	...	
Arsenic	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	
Carried forward	60	1,506	25,582	163	40	31	1,190	10,563	81	12	6	134	3,169	26	1	42,241	270	

Return of Diseases and Deaths in 1910—*continued.*

DISEASES.	GOLD COAST COLONY.					ASHANTI.					NORTHERN TERRITORIES.					Total cases treated.	Total deaths.	Remarks
	Remaining in Hospital at end of 1909.	Hospital Admissions.	Extern.	Deaths.	Remaining in Hospital at end of 1910.	Remaining in Hospital at end of 1909.	Hospital Admissions.	Extern.	Deaths.	Remaining in Hospital at end of 1910.	Remaining in Hospital at end of 1909.	Hospital Admissions.	Extern.	Deaths.	Remaining in Hospital at end of 1910			
Brought forward	60	1,566	25,582	163	40	31	1,190	10,563	81	12	6	134	3,169	26	1	42,241	270	
PARASITES :—																		
Cestoda	...	1	27	...	...	...	3	96	...	...	...	...	147	...	...	274	...	
Nematoda	...	...	127	...	...	...	12	70	...	...	...	...	42	...	..	251	...	
Trematoda	...	...	12	...	...	...	...	29	...	...	...	...	12	...	...	53	...	
Filaria Medinensis	...	63	312	...	4	2	79	349	...	...	1	1	141	...	...	948	...	
Filaria Loa	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	2	..	
Ankylostomiasis	...	5	11	...	1	...	1	...	...	...	...	...	...	...	...	17	...	
Elephantiasis	...	...	5	...	...	...	...	...	...	...	...	...	1	...	...	6	...	
Bilharzia	...	1	3	...	...	...	...	...	...	...	...	...	...	...	...	4	...	
Undiagnosed	...	11	9	1	...	...	...	..	...	...	...	...	...	...	...	20	1	
Insecta	...	...	72	...	...	...	2	21	...	...	...	...	21	...	...	116	...	
Total	60	1,587	26,162	164	45	33	1,287	11,128	81	12	7	135	3 533	26	1	43,932	271	

SANITARY REPORT, 1910.

1. TRYPANOSOMIASIS.

During 1910, about 50 cases of Sleeping Sickness were treated in the different Hospitals, and 11 deaths recorded. Towards the end of the year 107 cases were reported under observation or treatment by the Medical Officers in various districts, and distributed as follows :—

Accra	1
British Krachi	1
Coomassie	12
Kintampo	1
Sunyani	15
Ashanti Villages	70
N.T. Villages	5
Gambaga	1
Zouarugu	1

Glossina Palpalis is universal and widespread in almost every part of the Colony, from Anum on the eastern border to Berekum and Sunyani on the west, extending into the Gonja district, and even probably as far north as Gambaga. Dr. Kinghorn reports it pretty universal throughout the northern and western provinces of Ashanti and the Banda District. He states that the extent of the disease in the Western province bears a strict relation to the comparative frequency of Glossina Palpalis. In Wenki 5 per cent. of the inhabitants were found to be infected.

On the Togoland border Dr. Claridge states that the whole district is adapted to the tsetse fly and that Glossina Palpalis is present everywhere.

Dr. Beringer points out the widespread prevalence of this fly throughout the Gonja District, but whether this be the ordinary Glossina Palpalis or Glossina Palpalis var. Wellmani would appear open to question. Whole villages in this District are reported to have been deserted by the Natives on account of Sleeping Sickness prevalent there.

Dr. Rice has called attention to the prevalence of the fly all along the Coomassie Kintampo road, and it has long been known to be exceedingly plentiful in the Kintampo District. It would appear therefore that Glossina Palpalis is far more widely spread throughout the Colony and Protectorates than any other variety of tsetse. It is found almost universally throughout the whole of the forest and semi-forest country.

Taking into consideration the widespread distribution of Glossina Palpalis it seems extraordinary that Trypanosomiasis has not made greater headway or taken on an epidemic form. Whether human Trypanosomiasis is endemic and the Natives to some extent become immune, or whether we are dealing in this Colony with a strain of infection of low virulence, are hypotheses to neither of which I care to commit myself.

The seriousness and the possibilities of Sleeping Sickness, as far as the Gold Coast is concerned, are now well recognized, and every effort is being made to cope with a situation that at first sight strikes one as being well-nigh superhuman.

It would not appear that the time is yet ripe for compulsory segregation of the infected. One's efforts must be directed for the present to the intelligent clearing of bush round villages, fords, ferries, etc., in fly districts, to the erection of segregation camps and hospitals, and to gaining the confidence of the Native, and persuading him and educating him as to the good to be derived from attending these hospitals. The Chiefs should be held responsible for these clearings, and some system of compulsory notification of the infected should be insisted on.

During the year £4,000 was specially voted for Sleeping Sickness Preventive Measures.

Three Special Service Medical Officers were appointed, some excellent work was done, and much useful information obtained as to the distribution of the disease and the fly.

It is extremely difficult to start a proper system of Prophylaxis until the distribution of Trypanosomiasis and Glossina Palpalis are more definitely mapped out.

A Sleeping Sickness Hospital was completed and opened at Anum during the early part of the year. It consists of two mosquito-proofed rooms, measuring respectively 31½ ft. by 18 by 12 and 15½ ft. by 18 by 12, and capable of accommodating 8 to 10 patients. The Staff consists of a Medical Officer and a Dispenser pupil. The attendance was disappointing. For many months the wards were entirely empty. The Native seems to make light of the disease, and it is difficult to persuade him to come for treatment. A Sleeping Sickness Hospital was also erected at Kintampo. Here there were eight admissions and three deaths during the year. A fly-proof room was set apart in the Native Hospital at Coomassie for the treatment of these cases. There were four admissions and two deaths in the twelve months.

SLAUGHTER-HOUSE BLOOD SMEARS.

During the last half-year 1,181 blood examinations were made of cattle killed in the various slaughter-houses.

In 87 of these cases trypanosomes were found—a percentage of 7·36. In 26 cases other forms of parasites were noted. Of cows, 35·97 per cent. were found to be suffering from Trypanosomiasis, sheep, 14·54, per cent., goats, 15·42 per cent. No trypanosomes were reported to have been found in pigs.

RETURN OF THE RESULT OF PERIODICAL EXAMINATION OF BLOOD SMEARS TAKEN FROM THE SLAUGHTER-HOUSES OF THE COLONY AND PROTECTORATE FROM JULY TO DECEMBER, 1910.

CATTLE.					SHEEP.					GOATS.					PIGS.				
Number Examined.	Number with Trypanosomes.	Number with other Parasites.	Percentage with Trypanosomes.	Percentage with other Parasites.	Number Examined.	Number with Trypanosomes.	Number with other Parasites.	Percentage with Trypanosomes.	Percentage with other Parasites.	Number Examined.	Number with Trypanosomes.	Number with other Parasites.	Percentage with Trypanosomes.	Percentage with other Parasites.	Number Examined.	Number with Trypanosomes.	Number with other Parasites.	Percentage with Trypanosomes.	Percentage with other Parasites.
139	50	15	35 97	10·79	165	24	3	14·54	1·81	843	13	8	15·42	·94	34	—	—	—	—

2. YELLOW FEVER.

In the early part of the year there were 10 cases of Yellow Fever amongst Europeans in Seccondee, 9 of which were fatal. Three deaths were also known to have occurred amongst natives. The first notified case of the epidemic occurred on the 12th April, and the last death took place on the 22nd May.

On 15th July a death from the same cause was reported from Axim, and on 18th July the last case of the epidemic was brought into Seccondee from 12½ mile camp.

A full report has already been furnished to the Secretary of State of the amounts voted and expended in the different towns, and the preventive measures instituted in each.

I only append therefore a *résumé* of the work done.

YELLOW FEVER PREVENTIVE MEASURES.

1. 31 European Houses were rendered partly mosquito proof. Only 2 houses were rendered wholly so.
2. 34 public wells were made mosquito proof.
3. 674 private wells ,,
4. 133 public tanks ,,
5. 815 private tanks ,,
6. 2,631 barrels ,,
7. 590 lineal yards of concrete drains were repaired or reconstructed.
8. 8,608½ lineal yards of new concrete drains constructed.
9. 6,041 lineal yards ditches dug for drainage.
10. 4,531,743 square yards grass and vegetation cut.
11. 664 pools or excavations filled up.
12. 83,779 square yards marsh land raised and drained (exclusive of Seccondee lagoon).
13. 2,930 drains oiled.
14. 2,040 pools oiled.
15. 22,028 tanks and barrels oiled.
16. Number of Inspectors employed, 41.
17. Number of houses inspected, 77,096.
18. Number of houses where larvæ were found, 6,656.
19. Notices served *re* larvæ, 3,937.
20. Number fined for having larvæ on premises, 777.

21. The Cape Coast Town Council passed some excellent bye-laws with a view to obtain further powers for dealing with mosquito larvæ, but these were disallowed in deference to the Attorney-General's opinion that they were "ultra vires."

22. An Ordinance to provide for the Destruction of Mosquitoes throughout the Colony is at present under the consideration of the Legislative Council.

23. The total amount voted during the year for Yellow Fever Preventive Measures was £9,030 15s. 6d.

The approximate expenditure in the different Stations is tabulated below:—

EXPENDITURE ON YELLOW FEVER PREVENTIVE MEASURES DURING 1910.

	Amount Expended on Extra Labour Employed.			Amount Expended on Extra Sanitary Inspectors.			Amount Expended for Fumigation.			Amount Expended for Mosquito Proofing.			Amount Expended for Constructive Work.			Other Measures.			Total.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Accra	...	...	...	...	...	...	...	...	...	...	...	...	...		...	...	...	...	1294	1	3
Winnebah ...	343	15	6	...	...	...	...	...	...	15	15	11	80	1	11	32	1	0	471	14	4
Saltpond... ...	80	11	9	37	10	0	..	...	...	154	4	4	...	...	...	135	15	4	408	1	5
Cape Coast ...	179	2	4	60	0	0	...	...	..	15	7	6	...	...	...	285	5	1	539	14	11
Elmina	135	11	3	16	13	4	...	...	...	56	3	11	...	...	...	...	...	...	208	8	6
Seccondee ..	1408	15	4	58	9	9	302	13	0	219	8	1	1233	2	3	36	17	8	3259	6	1
Axim	449	11	10	36	2	6	10	16	0	94	14	1	111	12	1	31	6	...	734	2	6
Quittah	16	16	9	...	...	...	...	...	...	20	6	0	...	...	...	...	...	...	37	2	9
Tarquah... ...	71	9	0	20	10	3	...	...	...	...	...	...	...	...	...	1	10	0	93	9	3
TOTAL £	2685	13	9	229	5	10	313	9	0	575	19	10	1424	16	3	522	15	1	7046	1	0

3. FILARIASIS.

Only 6 cases of elephantiasis were reported under treatment during the year.

There were 3 cases of Filaria Loa recorded.

Although it cannot be said that any special preventive measures have been set on foot with reference to this disease in particular, still the fact has not been lost sight of that the prevention of Filariasis practically resolves itself into protection from mosquito bite.

A rigorous campaign against mosquitoes of every variety is at present being conducted.

4. PLAGUE

It is pleasant to report that the past year has been entirely free from this epidemic.

The lessons of the previous year have, however, been taken to heart. Rats are being regularly and systematically examined. The Clayton machine is being periodically used to keep these vermin in abeyance.

A mechanic has been provided for the Clayton machines, and regular bi-weekly Claytonising of warehouses harbouring rats will be carried on in Accra, Seccondee and Cape Coast.

5. SMALL-POX.

162 cases are reported as having been treated in Hospital and 42 deaths were recorded—a mortality of 25·09 per cent., as compared with 217 cases and a mortality of 17·05 per cent in 1909. This represents but a small proportion of cases that actually occurred, as a large number are concealed in the bush and never heard of.

At the close of the year 61 cases were under treatment and distributed as follows:—

Volta District	4
Dunkwa	1
British Krachi.	6
Coomassie	1
Kintampo	1
Obuasi	1
Sunyani	4
Ashanti Villages	30
Tamale	13

In Ashanti there were frequent small and scattered outbreaks, but it is impossible to obtain reliable information, and statistics are out of the question.

In the Birrim District in August 159 cases were isolated. Two Medical Officers were despatched there, and some 5,369 vaccinations were performed and many sanitary improvements carried out in the district.

At the latter end of the year there was a small outbreak in Tamale.

25,399 vaccinations were performed throughout the Colony during the twelve months ; of these, 14,069 were successful, and 11,330 unsuccessful. In the previous year 13,614 individuals were vaccinated.

Whenever an outbreak has been reported Medical Officers have been immediately sent to the district to take the necessary steps to stamp out the disease, and native vaccinators have also been sent to patrol and vaccinate in the district, but the ways of the native are inscrutable. At times they will flock to be vaccinated, at others they will stampede and nothing will persuade them to return.

There can be no doubt that the practice of inoculation carried out by natives in some districts has been responsible for a large number of deaths and for the introduction of Small-Pox into fresh villages.

6. DYSENTERY.

The records of the various Hospitals show that 479 cases of Dysentery were treated with a mortality of 42 = 8·76 per cent., as compared with 328 cases in the previous year and a mortality of 4·26 per cent.

Amongst European Officials there were 11 cases, none of which ended fatally.

Intestinal affections are very common amongst the natives, and taking into consideration the great carelessness displayed in most villages and many towns with regard to the pollution of the water supplies, the wonder is that intestinal, troubles are not very much more prevalent and fatal.

A great deal of attention has been paid recently, and a large amount of work done in protecting the water supplies from pollution and contamination.

In all the principal towns, the majority of wells have been protected, and this work is being proceeded with as rapidly as funds will admit.

One cannot expect, for many years to come, to see a proper drainage scheme and a pipe-borne water supply laid on in these towns—with two exceptions—but it is hoped that in the course of a few months there will not be a single well that is not properly protected—at any rate as far as the principal towns are concerned.

Throughout the Colony and Protectorates, at the end of the year, 34 public wells and 674 private ones had been protected against surface contamination.

7. ENTERIC.

Only 4 cases were treated in Hospital during the year, and one of these was fatal.

Three out of the four were European Officials.

No special preventive measures have been adopted in this direction, as hitherto enteric has been exceedingly rare in the Colony.

8. ANKYLOSTOMIASIS.

Only 18 cases of Ankylostomiasis were recorded.

Ankylostomum Duodenale is known to be prevalent. In 1905 the presence of Necator Americanus amongst the natives of this Colony was demonstrated. Several cases of Uncinariasis have been reported from the Aburi district.

There is reason to believe that Uncinaria Americana (Necator Americanus) is more widespread than it is generally reported to be, and probably we shall find that with the more systematic examination of the stools recently instituted Uncinariasis is by no means an uncommon disease.

The protection of the wells against surface contamination, at present being proceeded with, will undoubtedly aid in the diminution of this and other Helminthic Diseases.

9. TÆNIASIS.

The Hospital Records show that 273 cases of Cestode infection received treatment. No other particulars are given, but when one takes into consideration how universally the pig is kept and fed upon, it is only reasonable to suppose that the majority of these cases were cases of Tænia Solium. It is the general opinion that Tæniasis is very much more common amongst natives than the above figures would lead us to suppose.

Until pigs are more or less confined, and the very primitive methods of "conservancy" practised in most bush villages, is improved upon, it is difficult to see what measures can be taken to abate this evil. It is a matter that will probably right itself *pari passu* with the advance of sanitation in the bush villages.

10. BILHARZIA.

Only 3 cases of Bilharziosis were recorded during the year.

No special preventive warfare has been waged against Bilharzia Hæmatobia (Distomum Hæmatobium).

The large amount of work done however in protecting water supplies from contamination must have a good effect in this direction.

11. TRICHINOSIS.

No cases reported.

12. GUINEA WORM.

There were 944 cases recorded in the various Hospitals during the year.

Many attempts have been made to trace the sources of infection, and when successful the infected pools have been dealt with.

As a rule it is not easy to trace an infection to its source, information is difficult to obtain and generally misleading. You may provide the native with a good water supply, but you cannot insist on his drinking that water and that alone.

His salvation, as far as guinea worm is concerned, rests on his education and his realizing how he gets the guinea worm.

(III.) GENERAL MEASURES.

1. SEWAGE DISPOSAL.

There is no water-borne disposal of sewage in the Colony. The latrine pans are for the most part emptied into the sea or trenched.

An improved, more sanitary form of latrine was started during the year. The floor was raised and graded so as to allow of the washings being collected in a pan placed outside, instead of saturating and polluting the ground around, as was formerly the case. A large number of latrines have been reconstructed in accordance with this improved type, and the remainder are being altered as rapidly as funds and labour will allow.

The introduction of an improved type of pan is also at present under consideration.

During the year 72 new public latrines were erected, 46 for males and 26 for females.

91 were repaired = 63 for males, 28 for females.
43 were demolished = 30 for males, 13 for females.
341 pit latrines still exist in the larger towns, and 80 cesspools.

There are 682 private latrines.

Some 889,140 pails of night soil have been removed during the year, 209,510 pails of excreta have been trenched and the remainder thrown into the sea.

2. DISPOSAL OF REFUSE.

The common methods of disposal of refuse were :—

1. Filling up holes.
2. Burning.
3. Dumping in the sea.
4. Dumping on marked out dumping grounds.

A large number of incinerators have recently been, and are being, erected. It is intended that all the larger towns shall be provided with two or three incinerators, mostly of the Bee-hive type. In future therefore the greater part of the refuse will be got rid of by burning in these incinerators. There are at present 43 destructors in daily use, distributed as follows .—

Accra	2
Seccondee	2
Quittah	1
Dodowa	1
Saltpond	2
Cape coast	1
Tarquah	2
Elmina	1
Obuasi	1
Coomassie	7
Kintambo	1
N.T's	22

There are about 195 dust-bins in use.

Some 4,329 headloads of rubbish are daily removed by scavengers, and 38 carts are in addition in daily use.

About 21 loads of tin cans and other incombustible material are daily removed from houses and compounds, and buried.

3. WATER SUPPLY.

There can be no doubt that one of the crying needs of the Colony is "improved water supply."

Accra and Seccondee have now commenced their schemes for a pipe-borne supply. It will probably be some time before other towns are similarly favoured, but it is imperative in the meantime that such water as is available should be protected from contamination. In this direction a large amount of work has been done during the past year. The unfortunate outbreak of Yellow Fever was not without some good results—money was voted and drinking water sources protected on a scale that would not otherwise have been possible.

Only one town at present (with the exception of one or two of the mining villages) boasts a pipe-borne supply, and that is Obuasi. The town is provided with 12 stand pipes, laid on by the mine.

The drinking water in the towns is for the most part either storage rain water or water from shallow wells. In the bush villages the supply is usually from adjacent streams.

There are 58 public wells in the Colony and Protectorates, and 1,224 private ones, 130 public tanks and 854 private ones, and 3,043 water barrels. Of these various water receptacles 80·50 per cent. have now been properly protected. In a short time there will be but few that have not similarly been dealt with.

4. DRAINAGE.

1. There is little or no sub-soil drainage.

2. Surface drainage. About 8,608½ yards of masonry drains were constructed during the year, and 6,041 yards of ditches dug and graded.

Extensive drainage schemes are at present under consideration for Accra, and it is proposed to spend large sums of money on Seccondee. In both these cases it will be neccessary to complete these schemes before the arrival of the pipe-borne water supplies now in course of construction.

The following table shows the amount of drainage completed in the principal towns during the year :—

	MASONRY.				EARTH.	
	Total No. Linear Yds	Linear Yds. re-constructed during 1910.	Linear Yds. repaired during 1910.	Linear Yds. constructed during 1910.	Total No. Linear Yds.	Linear Yds. dug during 1910.
Accra	8,000	—	—	5,000	—	—
Winnebah	2,020	—	—	760	—	480
Saltpond	—	—	—	150	—	—
Cape Coast	—	—	—	1,418	—	—
Seccondee	4,900	150	320	280	—	—
Axim	1,240	—	—	300	—	—
Tarquah	—	—	—	334½	—	—
Akuse	76	—	—	76	—	4,400
Addah	—	—	—	—	—	250
Quittah	586	—	—	158	—	—
Coomassie	591	120	—	—	—	411
Obuasi	122	—	—	132	—	—
Sunyani	—	—	—	—	—	500

5. CLEARANCE OF BUSH.

Owing to the Yellow Fever Preventive Vote allowed to the different towns and the greater number of scavengers in consequence possible, more bush clearing was done during the latter half of the year than I suppose has ever before been known in the history of these towns.

Some 4,531,743 square yards are reported to have been cleared, but probably this does not represent anything like the amount of clearing actually done.

In addition to having the interior of the town cleared, the aim in view is to have the entire outskirts also well cleared to the extent of at least 100 yards. This is a fairly large undertaking and requires time. Many of the towns up to the present have been well cleared round to the extent of 50 yards or more.

6. PROSECUTIONS.

There were 5,170 prosecutions made in the Sanitary Department during the year, and 4,397 convictions obtained. Of these, 4,393 were fined, and four imprisoned.

The total amount collected in fines was £1,621. 10s. 6d.; with the exception of Accra, an average of over 96 per cent. of the cases prosecuted were convicted.

In Accra, out of 957 prosecutions there were only 333 convictions. The M.O.H. explains this by the delay experienced in Accra both in getting summonses issued and also in having the cases heard. (See par. 12 of Recommendations.)

ANNUAL RETURN OF PROSECUTIONS MADE IN THE SANITARY DEPARTMENT FOR THE YEAR 1910.

Station.	No. of Prosecutions.	No. of Convictions.	No. fined.	Total Amount of Fines.			No. imprisoned.
				£	s.	d.	
Accra	957	333	333	177	10	6	
Winnebah	592	564	564	330	2	0	
Saltpond	60	57	56	22	9	6	1
Cape Coast	188	182	182	93	9	0	
Elmina	474	474	474	105	19	6	
Seccondee	438	329	329	172	10	0	
Axim	—	—	—	—	—	—	
Tarquah	340	321	320	96	9	0	1
Tarquah Prestea	—	—	—	—	—	—	
Akuse	21	15	15	4	2	0	
Addah	25	25	25	4	4	6	
Quittah	100	76	76	22	10	0	
Anum	—	—	—	—	—	—	
Nsawam	—	—	—	—	—	—	
Annamaboe	23	23	23	6	15	0	
Appam	84	81	81	54	12	6	
Dodowah	179	164	164	74	2	0	
Chama	54	54	54	14	8	0	
Coomassie	431	429	429	132	12	6	
Obuasi	332	332	332	143	19	6	
Sunyani	—	—	—	—	—	—	
Kintampo	54	30	30	10	7	0	
Salaga	285	279	279	22	16	6	
Wa	43	43	43	11	3	0	
Bole	31	31	31	3	10	6	
Navarro	—	—	—	—	—	—	
Zouaragu	—	—	—	—	—	—	
Lorha	2	2	2	0	4	0	
Tamale	319	319	319	40	3	0	
Gambaga	50	49	47	7	19	0	2
Bawku	—	—	—	—	—	—	
Dunkwa	8	6	6	2	15	0	
Total	5,170	4,397	4,393	£1,621	10	6	4

(B) MEASURES TAKEN TO SPREAD KNOWLEDGE OF HYGIENE & SANITATION.

Lectures. Most of the Medical Officers have during the course of the year given a series of lectures or demonstrations to their dressers. School-teachers and others outside were at liberty to attend, and in some instances this opportunity was taken advantage of.

Teaching in Schools. No information on this point is obtainable from the Director of Education.

(C) RECOMMENDATIONS FOR FUTURE WORK.

1. *Mosquito Brigades.*—The interest taken by Europeans, more especially non-officials, has not been encouraging.

One or two refreshing outbursts of zeal in this direction have been witnessed, but they seem to have died a speedy natural death.

The interest displayed by the native may be written down as nil.

This being so, it is hopeless, for the present at any rate, to expect to derive much good from voluntary brigades.

Brigades of the necessary strength must be maintained in all the principal towns, and the necessary sums for this must be voted.

Funds were available during the latter half of the year, from the Yellow Fever Preventive Vote, and a large amount of work was done in the Anti-Mosquito Crusade. Stegomyia index in some places was reduced as low as 1 and 2 per cent., and Anopheles practically banished. It will be a great pity to let things revert to their former state, which they most certainly will unless the necessary funds are forthcoming.

In Accra, for example, during November and December the Town Council had not the funds to maintain a Mosquito Brigade.

Unless the necessary steps are taken to prevent it, it is quite possible that such a thing may again occur when we have no Yellow Fever Vote to fall back on.

2. The *drainage of the swamps* in and around the large towns should be taken in hand. I recognise that this is a big job, and beyond the resources of the Colony to tackle all at once, but I suggest that a reasonable sum be voted annually for " drainage of swamps," and the work gradually proceeded with.

3. *Quinine* should be distributed gratis, and I make the rather radical suggestion that it should be made compulsory for school children and the children of officials to take, say, their bi-weekly dose.

4. I suggest that malarial patients be carefully isolated, and that the *fumigation* of malaria infected houses be made compulsory.

5. *Education of the native* as to the vital importance of the mosquito and other insects in conveying disease, requires more attention.

The attempts in this direction in the past have not, I admit, been encouraging, but if funds are obtainable to make the subject a more interesting one, and to print simple pamphlets in the commonest native languages for general distribution, in addition to the instruction given in schools, then perhaps some headway might be made.

6. Although it is considered that not much good is likely to accrue, at the present, from the compulsory isolation of Sleeping Sickness cases, still I am of opinion that more stringent measures should be adopted towards chiefs, making it compulsory on them to *notify cases* of this disease in their districts.

7. More stringent legislation should be introduced, imposing on chiefs the obligation of clearing round their villages, water supplies, etc. *Special Inspectors* should be appointed to continually inspect these clearings, and see that they are kept as they should be.

8. All *Native Hospitals* in the Colony should be made mosquito proof, unless it can be proved that the district is fly and mosquito free.

9. I suggest that some weight be brought to bear on the employers of white labour in the Colony, with reference to the *segregation* of their employees.

It may not be advisable to introduce any legislation making the segretion of whites compulsory, but the heads of firms and others ought to be very distinctly made to understand their moral responsibility in this matter.

10. It is of vital importance that the *water supplies* of the larger towns should be protected against surface contamination with the least possible delay, and it would be an improvement were a large number of the existing wells converted into wells of the Macgregor type.

Some work is being done in this direction, but the matter is so important that the work ought to be pushed to completion with the utmost despatch, at the expense of other work if necessary.

11. It is essential that provision be made for a "*House-to-house collection of refuse*," in the larger towns.

An estimate in detail will be prepared for this and submitted for inclusion in the vote for "Scavengers and Labourers" in the 1912 estimates.

12. Many complaints have been made as to the delay experienced in the *hearing of sanitary cases*, and the failing of the prosecution in consequence.

The difficulties are manifest, but the time has arrived when some more expeditious method of dealing with sanitary cases should be instituted.

13. The present position of the Sanitary Department to the *Town Councils* requires some adjustment.

The following are recommendations to be carried out in the different stations in the early part of 1911:—

AXIM.

1. The three new Government wells to be converted into wells of the Macgregor type.
2. Three additional Macgregor wells to be constructed.
3. Three Incinerators to be built.
4. Streets to be built up to allow storm water to flow off into the side drains.
5. Concrete drain to be built through Lower Town swamp to sea, and the surrounding low lying land to be filled in.
6. A European Hospital to be erected.

TARQUAH.

1. One new Incinerator.
2. Swamp bottom of Government hill to be drained.
3. Drain along main street to be extended.

DIXCOVE.

1. One additional sea latrine.
2. Attention to water supply at head of 2nd lagoon.

DUNKWA.

1. Two new Incinerators.
2. Pit latrines to be roofed.

ADJUAH.

Latrines to be improved.

NSAWAM.

1. Concrete drains on each side main street.
2. Two Incinerators.

SECCONDEE.

1. Drainage scheme continued.
2. Laying out new Hausa Zongo do.
3. Filling in large lagoon do.
4. Drain and fill in Sweet Water Lagoon.

ELMINA.

1. One new Incinerator.
2. Existing wells converted into Macgregor wells.
3. Two new Macgregor wells.

CAPE COAST.

1. Four Incinerators.
2. Two Macgregor wells.
3. Several deep wells at north end of town.
4. Five new sea latrines.
5. Three new pan latrines.
6. Concrete platform for emptying latrine pans into sea.
7. Slaughter-house to be improved.
8. Swamp opposite cemetery to be filled in and drained.
9. The drainage system to be extended.

SALTPOND.

1. New Incinerator.
2. Latrines to be improved.
3. Extended drainage.
4. Pit latrines to be roofed.
5. Tanks to be made mosquito proof.
6. Existing wells to be converted into Macgregor wells.

WINNEBAH.

1. New Slaughter-house.
2. Three Incinerators.
3. Mortuary and Native Hospital made mosquito proof.
4. Latrines to be improved.
5. Fish Market to be drained.
6. Hausa Zongo moved to a new site.
7. Pump for prison tank.
8. Weep holes to be made in drains.
9. Drainage system to be extended.

MANGOASE.

1. One Incinerator.
2. Pit latrines to be roofed.

KOMFRODUA.

1. One Incinerator.
2. Pit latrines to be roofed.

ADAWSO.

1. Slaughter-house.
2. One Incinerator.
3. Pit latrines to be roofed.
4. Market to be drained.

DODOWAH.

1. One Incinerator.
2. Drainage to be extended.

SOMANYA.

1. Two Incinerators.
2. Pit latrines to be roofed.

AKUSE.

1. Four Incinerators.
2. Lȧtrines to be improved.
3. European Quarters to be made mosquito proof.
4. Swamp by Government bungalow to be drained.

ADDAH.

1. Three Incinerators.
2. Existing wells to be converted into Macgregor wells.
3. Latrines to be improved.

QUITTAH.

1. One Incinerator.
2. Latrines to be improved.

COOMASSIE.

1. Latrines to be improved.
2. New Wash-house.
3. New Slaughter-house.
4. Two new wells.
5. Market to be drained.
6 A Pound.
7. Drainage of main swamp.

ACCRA.

1. Extended drainage.
2. More Incinerators.
3. More Latrines.
4. Extension of Salaga Market.
5. Extension of European Segregation.

SANITARY REPORTS ON VARIOUS STATIONS.

(*Extracts from the Reports sent in by the Medical Officers, i/c.*)

ELMINA.

Majority of water barrels, etc., made mosquito proof.

Latrine floors raised.

One Destructor erected.

Water supplies unsatisfactory. European and Native both liable to surface pollution.

Drainage insufficient.

WINNEBAH.

Assisted by the £500 Yellow Fever Preventive Vote a very large amount of work was done in bush clearing, filling up ponds and wells, protecting water supplies, rendering barrels, etc., mosquito proof.

The greatest problems at present to be dealt with are :—

1. The water supply.
2. Overcrowding.

BAWKU.

Town fairly clean.

A large number of latrines and rubbish pits have been made, but the natives are reluctant to use them. Native water supply dirty and infected with guinea worm.

SALAGA.

A considerable amount of clearing, filling in of pools, raising of low-lying ground and some elementary drainage was carried out.

CAPE COAST.

All Government tanks have been put into repair, and underground tanks protected and supplied with pumps.

Unfortunately the pumps do not work well.

Streets are kept clean.

Quite 10 per cent. of the houses are in ruins.

Stegomyia abundant.

Numerous wells unprotected.

A large number of pit latrines, especially on Dawson's hill. This must lead to contamination of well water. Pan latrines not sufficiently numerous, and many of them not in good order.

European Official Quarters no better than they were four or five years ago, when they were condemned as unsuitable.

ADDAH.

Three new dustbins erected.

Three public wells protected with cement.

A number of excavations were filled, and some low-lying land at Beach town were raised.

SALTPOND.

New latrines and dustbins erected.

Three concrete dustbins converted into incinerators.

Active mosquito measures were taken, and at time of report, Stegomyia index reduced to 5 per cent.

SUNYANI.

Water supply excellent in quality.

About 500 yards round station cleared of elephant grass and planted with bahama, and in consequence number of Glossinæ in the station considerably diminished.

European station and Sunyani village kept fairly clean, but there is great difficulty in keeping the Hausa Zongo clean.

All refuse is collected twice daily by the prisoners, and burnt in two open incinerators. Bottles and tins are buried.

KINTAMPO.

General sanitary condition on the whole good.

Extensive clearing of bush round the water supply has been made.

Most of the rubbish is thrown into pits, where it is burnt.

There is one incinerator which has proved a marked success.

OBUASI.

The town is fairly clean.

During the year it was provided with a pipe-borne water supply. This has had a very marked effect on the breeding of mosquito larvæ, especially Stegomyia, which were very common here.

The bush has been cut and kept cleared all round the town for an area of 50 yards. All rubbish is now burnt.

COOMASSIE.

The sanitation has been well looked after, with a staff of about 70 scavengers in daily employment.

There are now 5 incinerators in constant operation.

About 30 or 40 cesspits have been found in existence in the premises of different people in Coomassie, and are now being abolished.

The water supply is abundant and good.

A number of surface drains have been completed, and, as funds permit, these will be gradually extended, but a lot of work is still necessary in this direction.

The Slaughter-house needs enlarging.

TARQUAH.

The sanitary condition of Tarquah has been improved during the year.

A great deal of clearing has been done, a large amount of swamp drained and excavations filled up.

Systematic attempts have been made to oil all tanks, barrels, drains, pools, etc.

Two new pan latrines have been erected.

Only two out of the four pump wells built during the previous year are in proper working order.

QUITTAH.

Town fairly clean.

475 feet drainage constructed during the year.

Bee-hive destructor almost completed.

AXIM.

The sanitation of Axim leaves much to be desired.

During the Yellow Fever Epidemic 30 men extra were employed, and a large amount of bush, with its inevitable accretions of tins and bottles, was cleared.

Several new drains were cut and pit latrines dug.

Many private wells have been closed and 5 public wells dug. Three of the latter have been supplied with pumps.

Lagoon side contains many houses built without permits under most insanitary conditions, crowded together, undrained, and to a great extent undrainable. It is proposed during the coming year to pull down many of these houses, moving the occupants to a more healthy site, and thus preparing the way for the filling up of the lagoon.

AKUSE.

The chief requirements of the town are :—

1. Adequate surface drainage.
2. Clearance of bush.
3. Protection of water receptacles.

A large number of borrow pits are being made by the P.W.D. near the European Officials' Bungalows. The land surrounding these bungalows on three sides appears to be of a swampy nature, even in the dry season.

J. H. COLLIER.

SUMMARY OF ROUTINE SANITARY WORK

Done during the year 1910 in the undermentioned towns :—

1. Accra
2. Addah
3. Akuse
4. Axim
5. Bole
6. Cape Coast
7. Coomassie
8. Gambaga
9. Kintampo
10. Obuasi
11. Quittah
12. Salaga
13. Saltpond
14. Seccondee
15. Sunyani
16. Tarquah
17. Wa
18. Winnebah

GOLD COAST.

No.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR IN THE TOWN OF ACCRA, GOLD COAST.

1. Name of Town : ACCRA.

—	Approximate area.	Number of proclaimed open spaces.
1910	6 square miles.	32, but not all proclaimed, though all recommended.
1911		
1912		

2. Population.

	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910	Estimated at 20,000.		147	21	
1911					
1912					

3. Housing.

—	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses :—		
1910	96	1,918 on T.C. Rate Book.
1911		
1912		

Number of Huts :—
1910 ... ... Included under Houses.
1911 ... ...
1912 ... ...

4. Mosquito Protection of Houses.

—	1910.	1911.	1912.
Number of European houses wholly mosquito protected	2		
Number of European houses with mosquito room	7		
Number rendered during the year wholly mosquito protected ...	*nil.*		
Number rendered during the year partially mosquito protected ...	*nil.*		

5. Erection of New Buildings during the Year.

—	1910.	1911.	1912.
Number of public buildings erected with sanction as to site, construction, and relation to other buildings	10, includes bungalows.		
Number of houses erected with sanction as to site, construction, and relation to other buildings	422		
Number of huts erected with sanction as to site, construction, and relation to other buildings			
Number of houses built without sanction	39		
Number of huts built without sanction...			

ACTION TAKEN :—

—	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910			196	
1911				
1912				

6. MARKETS.

—	Total number.	Number paved and drained.	Number unpaved.
1910	3	1 paved & drained. 2 paved only.	
1911			
1912			

7. SLAUGHTER-HOUSES.

—	Total number.	Number paved and drained.	Number unpaved.
1910	1	1	
1911			
1912			

8. LATRINES.

—	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—				
1910	42	296	23	190
1911				
1912				
Number of new Public Latrines erected during the year :—				
1910	4	40	4	40
1911				
1912				
Number of Public Latrines repaired during the year :—				
1910	2 rebuilt & enlarged		2 rebuilt & enlarged	
1911				
1912				
Number of Public Latrines demolished during the year :—				
1910	2 and 2 beach		2 and 2 beach	
1911				
1912				

—	1910.	1911.	1912.
Number of Private Latrines...	52		
Average number of pails of nightsoil removed daily	350		
Average number of soiled pails removed and clean pails substituted ...	350		
Number of nightsoil men employed to clean latrines and remove excreta ...	30		
Number of cesspools			
Number of cesspools cleansed			
Number of new cesspools constructed during the year			
Number of old cesspools abolished			
Number of cesspools oiled regularly by Department			

9. REMOVAL OF REFUSE.

———	1910.	1911.	1912.
Number of Dustbins	48		
Number of carts (if employed) at work daily to remove refuse from streets...	6		
Amount of refuse removed daily from streets...	40 carts*		
Number of carts (if employed) at work daily to remove refuse from yards and premises	*nil.*		
Amount of refuse removed daily from yards and premises	not recorded.		
Number of men employed for moving refuse	25		

* $1\frac{1}{2}$ cubic yards to cartload.

10. MODE OF DISPOSAL OF EXCRETA, REFUSE, AND OFFAL.

———	Daily average number of pails of excreta.			Daily average number of cartloads of refuse.			Daily average number of cartloads of Slaughter House and Market Offal.		
	1910.	1911.	1912.	1910.	1911.	1912.	1910.	1911.	1912.
Buried or trenched	*nil.*			*nil.*			*nil.*		
Burnt	,,			40					
Thrown into sea	350			*nil.*					
*Otherwise dealt with	*nil.*			,,					

* State mode of disposal.

11. AVERAGE DAILY NUMBER OF CARTLOADS OF TIN CANS, BOTTLES, BROKEN CROCKERY, AND OTHER INCOMBUSTIBLE MATERIAL REMOVED FROM HOUSES, HUTS AND COMPOUNDS.

1910.	1911.	1912.
43 for November and December.		

12. WATER SUPPLY.

Nature of Water Supply.	1910	1911.	1912.
Pipe-borne water :—			
Source (river, lake or spring) :—			
Number of linear yards	*nil.*		
Number of stand pipes along roads			
Number of stand pipes in compounds and houses... ...			
Wells :—			
Public :—			
Number	*nil.*		
Number with pumps protected against surface water and mosquito-protected			
Private :—			
Number	268		
Number protected against surface water and mosquito-protected	189		
Tanks :—			
Public :—			
Number underground	32		
Number mosquito-protected and served by pumps ...	26		
Number above ground	62		
Number mosquito-protected	62		
Number of 400 gallons capacity or less	*nil.*		
Number above 400 gallons	94		

——	1910.	1911.	1912.
Tanks :—			
Private :—			
Number underground	96		
Number mosquito-protected	86		
Number above ground	125		
Number mosquito-protected	108		
Number of 400 gallons capacity or less	not recorded		
Number above 400 gallons			
Nature of tanks :—			
Wood	14		
Iron	173		
Concrete	128		
Barrels : —			
Number	668		
Number mosquito-protected	547		

13. Drainage.

Nature of drainage.	Public.	Private.
Masonry drains :—		
Linear yards of masonry drains :—		
1910	8,000 roughly.	
1911		
1912		
Linear yards reconstructed during the year :—		
1910		
1911		
1912		
Linear yards repaired during the year :—		
1910		
1911		
1912		
Linear yards of new drains constructed during the year :—		
1910	5,000 roughly.	
1911		
1912		
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—		
1910	Not recorded.	
1911		
1912		
Number of linear yards of ditches dug and graded :—		
1910		
1911		
1912		
Average frequency of clearing ditches of grass :—		
1910	Every 2 months.	
1911		
1912		

14. Clearance of undergrowth, long grass, and jungle.

——	1910.	1911.	1912.
Number of square yards of weeds, grass, and vegetation cut and removed	Not recorded.		
Average frequency of clearance of rank vegetation on same area ...	Every 3 months.		

15. EXCAVATIONS AND LOW-LYING LAND.

——	1910.	1911.	1912.
Number of pools and excavations	78		
Number of excavations filled up	50		
Amount of low-lying and marsh land raised and drained	22,000 sq. ft.		
Number of pools, marshes, streams, &c., fish-stocked	*nil.*		
Number of cubic yards of material used for filling up pools and excavations	Not recorded.		
Number of persons fined for making new excavations	*nil.*		
Average number of men daily employed in filling up pools, &c.	6		

16. OILING.

——	1910.	1911.	1912.
Number of drains oiled	734 Nov. & Dec.		
Number of pools and excavations oiled	1,203		
Number of tanks and barrels oiled	3,454		
Average number of men daily employed for oiling drains, pools, and watertanks or barrels	6		

17. INSPECTIONS AND PROSECUTIONS.

——	1910.	1911.	1912.
Number of inspectors employed	6		
Number of houses inspected	6,308 Nov. & Dec.		
Number of houses where larvæ were found	1,013		
Number of notices served to remove conditions causing the breeding of larvæ	580		
Number of persons fined for having mosquito larvæ on premises	—		
Number of notices served to remove insanitary conditions on premises	862		
Number of persons fined for not removing insanitary conditions after notice	934*		
Number of soda and aerated water factories inspected	*nil.*		

* Includes unprotected water receptacles.

(Sgd.) A. G. ELDRED,

M.O.H., ACCRA.

GOLD COAST.

No.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR IN THE TOWN.

1. Name of Town: ADDAH.

——	Approximate area.	Number of proclaimed open spaces.
1910	490 Acres	*nil*
1911		
1912		

2. Population.

——	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910	About 1,	500	12	2	1,514
1911					
1912					

3. Housing.

——	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses:—		
1910	8	251
1911		
1912		

Number of Huts:—
1910 ... ... *nil*
1911 ... ...
1912 ... ...

4. Mosquito Protection of Houses.

——	1910.	1911.	1912.
Number of European houses wholly mosquito protected	2		
Number of European houses with mosquito room	1		
Number rendered during the year wholly mosquito protected ...	1		
Number rendered during the year partially mosquito protected ...	*nil*		

5. Erection of New Buildings during the Year.

——	1910.	1911.	1912.
Number of public buildings erected with sanction as to site, construction, and relation to other buildings	1		
Number of houses erected with sanction as to site, construction, and relation to other buildings	1		
Number of huts erected with sanction as to site, construction, and relation to other buildings	*nil*		
Number of houses built without sanction	,,		
Number of huts built without sanction	,,		

Action Taken :—

—	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910	*nil*	*nil*	*nil*	*nil*
1911				
1912				

6. Markets.

—	Total number.	Number paved and drained.	Number unpaved.
1910	1	Market shed only paved.	—
1911			
1912			

7. Slaughter-houses.

—	Total number.	Number paved and drained.	Number unpaved.
1910	*nil*	—	—
1911			
1912			

8. Latrines.

—	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—				
1910	7	4 in each	6	4 in each
1911				
1912				
Number of new Public Latrines erected during the year :—				
1910	*nil*		—	
1911				
1912				
Number of Public Latrines repaired during the year :—				
1910	*nil*		—	
1911				
1912				
Number of Public Latrines demolished during the year :—				
1910	*nil*		—	
1911				
1912				

—	1910.	1911.	1912.
Number of Private Latrines	5		
Average number of pails of nightsoil removed daily	126		
Average number of soiled pails removed and clean pails substituted	126		
Number of nightsoil men employed to clean latrines and remove excreta ...	4		
Number of cesspools	*nil*		
Number of cesspools cleansed	,,		
Number of new cesspools constructed during the year	,,		
Number of old cesspools abolished	,,		
Number of cesspools oiled regularly by Department	,,		

9. Removal of Refuse.

—	1910.	1911.	1912.
Number of dustbins	3		
Number of carts (if employed) at work daily to remove refuse from streets	1		
Amount of refuse removed daily from streets	3 cart loads		
Number of carts (if employed) at work daily to remove refuse from yards and premises...	done privately.		
Amount of refuse removed daily from yards and premises	do.		
Number of men employed for moving refuse	5		

10. Mode of Disposal of Excreta, Refuse, and Offal.

—	Daily average number of pails of excreta.			Daily average number of cartloads of refuse.			Daily average number of cartloads of Slaughter House and Market Offal.		
	1910.	1911.	1912.	1910.	1911.	1912.	1910.	1911.	1912.
Buried or trenched	*nil*								
Burnt	,,								
Thrown into sea	126								
*Otherwise dealt with	*nil*								

* State mode of disposal.

11. Average Daily Number of Cartloads of Tin Cans, Bottles, Broken Crockery and Other Incombustible Material Removed from Houses, Huts and Compounds.

1910.	1911.	1912.
Not estimated—done privately by occupiers.		

12. Water Supply.

Nature of Water Supply.	1910.	1911.	1912.
Pipe-borne water :—			
Source (river, lake or spring) :—			
Number of linear yards	*nil.*		
Number of stand pipes along roads...	,,		
Number of stand pipes in compounds and houses	,,		
Wells :—			
Public :—			
Number	10		
Number with (*a*) pumps protected against surface water (*b*) and mosquito-protected (*c*)	(*a*) *nil.* (*b*) 3 (*c*) *nil.*		
Private :—			
Number	7		
Number protected against surface water and mosquito protected	*nil.*		
Tanks :—			
Public :—			
Number under ground	2		
Number mosquito-protected and served by pumps ...	2		
Number above ground	8		
Number mosquito-protected...	8		
Number of 400 gallons capacity or less	*nil.*		
Number above 400 gallons	10		

——	1910.	1911.	1912.
Tanks :—			
Private :—			
Number under ground	6		
Number mosquito-protected	5		
Number above ground	3		
Number mosquito-protected	2		
Number of 400 gallons capacity or less	*nil.*		
Number above 400 gallons	9		
Nature of tanks :—			
Wood	2		
Iron	3		
Concrete	4		
Barrels :—			
Number	6		
Number mosquito-protected	*nil.*		

13. DRAINAGE.

Nature of drainage.	Public.	Private.
Masonry drains :—		
Linear yards of masonry drains :—		
1910	*nil.*	*nil.*
1911		
1912		
Linear yards reconstructed during the year :—		
1910	,,	,,
1911		
1912		
Linear yards repaired during the year :—		
1910	,,	,,
1911		
1912		
Linear yards of new drains constructed during the year :—		
1910	,,	,,
1911		
1912		
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—		
1910	,,	,,
1911		
1912		
Number of linear yards of ditches dug and graded :—		
1910	250 yards.	,,
1911		
1912		
Average frequency of clearing ditches of grass :—		
1910	Above newly constructed.	,,
1911		
1912		

14. CLEARANCE OF UNDERGROWTH, LONG GRASS AND JUNGLE.

——	1910.	1911.	1912.
Number of square yards of weeds, grass, and vegetation cut and removed	1,200 yds.		
Average frequency of clearance of rank vegetation on same area ...	Monthly.		

15. Excavations and Low-lying Land.

——	1910.	1911.	1912.
Number of pools and excavations	25		
Number of excavations filled up	6		
Amount of low-lying and marsh land raised and drained	500 yds.		
Number of pools, marshes, streams, &c., fish stocked	*nil*		
Number of cubic yards of material used for filling up pools and excavations	not estimated		
Number of persons fined for making new excavations	*nil*		
Average number of men daily employed in filling up pools, &c. ...	15		

16. Oiling.

——	1910.	1911.	1912.
Number of drains oiled	*nil*		
Number of pools and excavations oiled	*nil*		
Number of tanks and barrels oiled	6 done privately		
Average number of men daily employed for oiling drains, pools, and watertanks or barrels			

17. Inspections and Prosecutions.

——	1910.	1911.	1912.
Number of inspectors employed	1 acting		
Number of houses inspected	251		
Number of houses where larvæ were found	18		
Number of notices served to remove conditions causing the breeding of larvæ	18		
Number of persons fined for having mosquito larvæ on premises ...	18		
Number of notices served to remove insanitary conditions on premises	40		
Number of persons fined for not removing insanitary conditions after notice	*nil*		
Number of soda and aerated water factories inspected	*nil*		

(Signed) R. O. WHITE, *M.O.*,
Addah,

December 31*st*, 1910.

GOLD COAST.

No.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR IN THE TOWN.

1. Name of Town : AKUSE.

——	Approximate area.	Number of proclaimed open spaces.
1910	½ Sq. Mile.	*nil*
1911		
1912		

2. Population.

——	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910	Total	4,500.	33	3	4,536
1911					
1912					

3. Housing.

——	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses :—		
1910	10	1,136 (estimated).
1911		
1912		

Number of Huts :—
1910 85
1911 ... ...
1912 ... ...

4. Mosquito Protection of Houses.

——	1910.	1911.	1912.
Number of European houses wholly mosquito protected	*nil*		
Number of European houses with mosquito room	1		
Number rendered during the year wholly mosquito protected ...	*nil*		
Number rendered during the year partially mosquito protected ...	„		

5. Erection of New Buildings during the Year.

——	1910.	1911.	1912.
Number of public buildings erected with sanction as to site, construction and relation to other buildings	2		
Number of houses erected with sanction as to site, construction, and relation to other buildings	4		
Number of huts erected with sanction as to site, construction, and relation to other buildings	*nil*		
Number of houses built without sanction	Not known		
Number of huts built without sanction	5		

ACTION TAKEN :—

—	Number of prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910	*nil*	*nil*	*nil*	8
1911				
1912				

6. MARKETS.

—	Total Number.	Number paved and drained.	Number unpaved.
1910	1	*nil*	*nil*
1911			
1912			

7. SLAUGHTERHOUSES.

—	Total Number.	Number paved and drained.	Number unpaved.
1910	1	1	*nil*
1911			
1912			

8. LATRINES.

—	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—				
1910	8	48	9	54
1911				
1912				
Number of new Public Latrines erected during the year :				
1910	*nil*		*nil*	
1911				
1912				
Number of Public Latrines repaired during the year :—				
1910	*nil*		*nil*	
1911				
1912				
Number of Public Latrines demolished during the year :—				
1910	*nil*		*nil*	
1911				
1912				

—	1910.	1911.	1912.
Number of Private Latrines	24		
Average number of pails of nightsoil removed daily	72 full pails.		
Average number of soiled pails removed and clean pails substituted ...	*nil*	(Pails are emptied on the spot into others used only for carriage, cleaned and replaced).	
Number of nightsoil men employed to clean latrines and remove excreta ...	8		
Number of cesspools	1		
Number of cesspools cleansed	*nil*		
Number of new cesspools constructed during the year	1		
Number of old cesspools abolished	1		
Number of cesspools oiled regularly by Department	*nil*		

9. REMOVAL OF REFUSE.

——	1910.	1911.	1912.
Number of dustbins	13		
Number of carts (if employed) at work daily to remove refuse from streets	3		
Amount of refuse removed daily from streets...	46	Cartloads	
Number of carts (if employed) at work daily to remove refuse from yards and premises	*nil*		
Amount of refuse removed daily from yards and premises	*nil*		
Number of men employed for moving refuse	6		

10. MODE OF DISPOSAL OF EXCRETA, REFUSE, AND OFFAL.

——	Daily average number of pails of excreta.			Daily average number of cartloads of refuse.			Daily average number of cartloads of Slaughter House and Market Offal.		
	1910.	1911.	1912.	1910.	1911.	1912.	1910.	1911.	1912.
Buried or Trenched	72			10			*nil*		
Burnt...	*nil*			36			*nil*		
Thrown into sea	*nil*			*nil*			*nil*		
*Otherwise dealt with	*nil*			*nil*			Slaughterhouse liquids drain into a lagoon which is connected with the R. Volta.		

*State mode of disposal.

11. AVERAGE DAILY NUMBER OF CARTLOADS OF TIN CANS, BOTTLES, BROKEN CROCKERY AND OTHER INCOMBUSTIBLE MATERIAL REMOVED FROM HOUSES, HUTS AND COMPOUNDS.

1910.	1911.	1912.
10		

12. WATER SUPPLY.

Nature of Water Supply.	1910.	1911.	1912.
Pipe-borne Water :—			
Source (river, lake or spring) :—			
Number of linear yards			
Number of stand pipes along roads...	*nil*		
Number of stand pipes in compounds and houses... ...			
Wells :—			
Public :—			
Number			
Number with pumps protected against surface water and mosquito-protected.	,,		
Private :—			
Number			
Number protected against surface water and mosquito-protected.	,,		
Tanks :—			
Public :—			
Number underground			
Number mosquito-protected and served by pumps ...			
Number above ground			
Number mosquito-protected...	,,		
Number of 400 gallons capacity or less			
Number above 400 gallons			

———	1910.	1911.	1912.
Tanks :—			
Private :—			
Number underground	3		
Number mosquito-protected	2		
Number above ground	20		
Number mosquito-protected	15		
Number of 400 gallons capacity or less	10		
Number above 400 gallons	13		
Nature of tanks :—			
Wood	3		
Iron	17		
Concrete	3		
Barrels :—			
Number	198		
Number mosquito-protected	3		

13. Drainage.

Nature of drainage.	Public.	Private.
Masonry drains :—		
Linear yards of masonry drains :—		
1910	76	
1911		
1912		
Linear yards reconstructed during the year :—		
1910	*nil*	
1911		
1912		
Linear yards repaired during the year... ...		
1910	,,	
1911		
1912		
Linear yards of new drains constructed during the year :—		
1910	76	
1911		
1912		
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—		
1910	3520	
1911		
1912		
Number of linear yards of ditches dug and graded :—		
1910	4400	
1911		
1912		
Average frequency of clearing ditches of grass :—		
1910	Once a month during Wet Season.	
1911		
1912		

14. Clearance of Undergrowth, Long Grass, and Jungle.

———	1910.	1911.	1912.
Number of square yards of weeds, grass, and vegetation cut and removed ... ... Average frequency of clearance of rank vegetation on same area ...	No record.	In the dry season large areas of grass are burned.	

15. Excavations and Low-lying Land.

———	1910.	1911.	1912.
Number of pools and excavations	50 (at least)		
Number of excavations filled up	No record		
Amount of low-lying and marsh land raised and drained	*nil*		
Number of pools, marshes, streams, &c., fish-stocked	,,		
Number of cubic yards of material used for filling up pools and excavations...	No record		
Number of persons fined for making new excavations	*nil*		
Average number of men daily employed in filling up pools, &c. ...	,,		

16. Oiling.

———	1910.	1911.	1912.
Number of drains oiled	No record		
Number of pools and excavations oiled			
Number of tanks and barrels oiled			
Average number of men daily employed for oiling drains, pools, and watertanks or barrels	*nil*		

17. Inspections and Prosecutions.

———	1910.	1911.	1912.
Number of inspectors employed	1		
Number of houses inspected	1000		
Number of houses where larvæ were found	1000		
Number of notices served to remove conditions causing the breeding of larvæ	28		
Number of persons fined for having mosquito larvæ on premises ...	*nil*		
Number of notices served to remove insanitary conditions on premises	126		
Number of persons fined for not removing insanitary conditions after notice	7		
Number of soda and aërated water factories inspected	*nil*		

(Sgd.) T. H. DUGON,

M.O., Akuse,

31*st December*, 1910.

The Senior Sanitary Officer,
Accra.

GOLD COAST.

No.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR IN THE TOWN.

1. Name of Town : AXIM.

——	Approximate area.	Number of proclaimed open spaces.
1910	1 square mile.	5
1911		
1912		

2. Population.

——	Number of Natives.		Number of Europeans.		Total.
	Males	Females.	Males.	Females.	
1910	7,500	(approx.)	113	3	7,616
1911					
1912					

3. Housing.

——	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses :—		
1910	10	1,081
1911		
1912		

Number of Huts :—
1910 ... ...
1911 ... ..
1912 ... ...

4. Mosquito Protection of Houses.

——	1910.	1911.	1912.
Number of European houses wholly mosquito protected	*nil*		
Number of European houses with mosquito room	2		
Number rendered during the year wholly mosquito protected ...	*nil*		
Number rendered during the year partially mosquito protected ...	2		

5. Erection of New Buildings During the Year.

——	1910.	1911.	1912.
Number of public buildings erected with sanction as to site, construction, and relation to other buildings	1		
Number of houses erected with sanction as to site, construction, and relation to other buildings	No record.		
Number of huts erected with sanction as to site, construction, and relation to other buildings	*nil*		
Number of houses built without sanction	"		
Number of huts built without sanction	"		

ACTION TAKEN:—

——	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910				
1911				
1912				

6. MARKETS.

——	Total number.	Number paved and drained.	Number unpaved.
1910	1	1 partly paved.	
1911			
1912			

7. SLAUGHTER-HOUSES.

——	Total number.	Number paved and drained.	Number unpaved.
1910	1	1	
1911			
1912			

8. LATRINES.

——	For Males.		For Females.	
	Number.	Number of Seats.	Number.	Number of seats.
Number of Public Latrines :—				
1910	6	36	6	36
1911				
1912				
Number of new Public Latrines erected during the year :—				
1910				
1911				
1912				
Number of Public Latrines repaired during the year :—				
1910				
1911				
1912				
Number of Public Latrines demolished during the year :—				
1910				
1911				
1912				

——	1910.	1911.	1912.
Number of Private Latrines	6		
Average number of pails of nightsoil removed daily	*nil*		
Average number of soiled pails removed and clean pails substituted ...	,,		
Number of nightsoil men employed to clean latrines and remove excreta	,,		
Number of cesspools	,,		
Number of cesspools cleansed	,,		
Number of new cesspools constructed during the year	,,		
Number of old cesspools abolished	,,		
Number of cesspools oiled regularly by Department	,,		

9. REMOVAL OF REFUSE.

—	1910.	1911.	1912.
Number of dustbins	10		
Number of carts (if employed) at work daily to remove refuse from streets	2		
Amount of refuse removed daily from streets	1,625		
Number of carts (if employed) at work daily to remove refuse from yards and premises			
Amount of refuse removed daily from yards and premises			
Number of men employed for moving refuse	6 av.		

10. MODE OF DISPOSAL OF EXCRETA, REFUSE AND OFFAL.

—	Daily average number of pails of excreta.			Daily average number of cartloads of refuse.			Daily average number of cartloads of slaughter house and market offal.		
	1910.	1911.	1912.	1910.	1911.	1912.	1910.	1911.	1912.
Buried or trenched	*nil*			*nil*			*nil*		
Burnt	,,			,,			,,		
Thrown into sea	40			30			25		
*Otherwise dealt with	*nil*			*nil*			*nil*		

*State mode of disposal.

11. AVERAGE DAILY NUMBER OF CARTLOADS OF TIN CANS, BOTTLES, BROKEN CROCKERY AND OTHER INCOMBUSTIBLE MATERIAL REMOVED FROM HOUSES, HUTS AND COMPOUNDS.

1910.	1911.	1912.
Not known.		

12. WATER SUPPLY.

Nature of Water Supply.	1910.	1911.	1912.
Pipe-borne water :—			
Source (river, lake or spring) :—			
Number of linear yards	*nil*		
Number of stand pipes along roads			
Number of stand pipes in compounds and houses ...			
Wells :—			
Public :—			
Number	5		
Number with pumps protected against surface water and mosquito-protected	3		
Private :—			
Number	14		
Number protected against surface water and mosquito-protected	1		
Tanks:—			
Public :—			
Number underground	*nil*		
Number mosquito protected and served by pumps ...			
Number above ground			
Number mosquito-protected			
Number of 400 gallons capacity or less			
Number above 400 gallons			

——	1910.	1911.	1912.
Tanks :—			
Private :—			
Number underground	*nil*		
Number mosquito-protected	*nil*		
Number above ground	60		
Number mosquito-protected	60		
Number of 400 gallons capacity or less	31		
Number above 400 gallons	29		
Nature of tanks :—			
Wood	4		
Iron	5		
Concrete	3		
Barrels :—			
Number	43		
Number mosquito-protected			

13. Drainage.

Nature of Drainage.	Public.	Private.
Masonry drains :—		
Linear yards of masonry drains :—	Main 12 ins.	
1910	550 yds. 690 yds.	No record.
1911		
1912		
Linear yards reconstructed during the year :—		
1910	*nil*	,,
1911		
1912		
Linear yards repaired during the year :—		
1910	*nil*	,,
1911		
1912		
Linear yards of new drains constructed during the year :—		
1910	300 yds.	,,
1911		
1912		
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—		
1910		
1911		
1912		
Number of linear yards of ditches dug and graded :—		
1910		
1911		
1912		
Average frequency of clearing ditches of grass :—		
1910	Every 2 months	,,
1911		
1912		

14. Clearance of Undergrowth, Long Grass and Jungle.

——	1910.	1911.	1912.
Number of square yards of weeds, grass and vegetation cut and removed			
Average frequency of clearance of rank vegetation on same area	Every 3 months		

15. Excavations and Low lying Land.

——	1910.	1911.	1912.
Number of pools and excavations			
Number of excavations filled up	12 wells		
Amount of low-lying and marsh land raised and drained	3,500 sup. yds.		
Number of pools, marshes, streams, &c., fish-stocked			
Number of cubic yards of material used for filling up pools and excavations			
Number of persons fined for making new excavations			
Average number of men daily employed in filling up pools, &c. ...	No record		

16. Oiling.

——	1910.	1911.	1912.
Number of drains oiled	74		
Number of pools and excavations oiled	No records		
Number of tanks and barrels oiled	535		
Average number of men daily employed for oiling drains, pools, and watertanks or barrels	27		

17. Inspections and Prosecutions.

——	1910.	1911.	1912.
Number of inspectors employed	7		
Number of houses inspected	1,081		
Number of houses where larvæ were found	367		
Number of notices served to remove conditions causing the breeding of larvæ	466		
Number of persons fined for having mosquito larvæ on premises ...	153		
Number of notices served to remove insanitary conditions on premises	466		
Number of persons fined for not removing insanitary conditions after notice	*nil*		
Number of soda and aerated water factories inspected	*nil*		

(Signed) F. M. JUPE, *M.O.*

February 3rd, 1911.

GOLD COAST.

No.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR IN THE TOWN.

1. Name of Town : BOLE.

—	Approximate area.	Number of proclaimed open spaces.
1910	25 acres	
1911		
1912		

2. Population.

—	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910	417	368	4	1	790
1911					
1912					

3. Housing.

—	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses :—		
1910	2	3
1911		
1912		
Number of Huts :—		
1910	339	
1911		
1912		

4. Mosquito Protection of Houses.

—	1910.	1911.	1912.
Number of European houses wholly mosquito-protected			
Number of European houses with mosquito room			
Number rendered during the year wholly mosquito-protected ...			
Number rendered during the year partially mosquito-protected ...			

5. Erection of New Buildings during the Year.

—	1910.	1911.	1912.
Number of public buildings erected with sanction as to site, construction, and relation to other buildings			
Number of houses erected with sanction as to site, construction, and relation to other buildings	1		
Number of huts erected with sanction as to site, construction, and relation to other buildings			
Number of houses built without sanction			
Number of huts built without sanction			

ACTION TAKEN :—

—	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910				
1911				
1912				

6. MARKETS.

—	Total number.	Number paved and drained.	Number unpaved.
1910	1		1
1911			
1912			

7. SLAUGHTER-HOUSES.

—	Total number.	Number paved and drained.	Number unpaved.
1910	1	1	
1911			
1912			

8. LATRINES.

—	For males.		For females.	
	Number.	Number of seats.	Number.	Number of Seats.
Number of Public Latrines :—				
1910	15 Pit	Latrines.		
1911				
1912				
Number of new Public Latrines erected during the year :—				
1910	15 ,,	,,		
1911				
1912				
Number of Public Latrines repaired during the year :—				
1910				
1911				
1912				
Number of Public Latrines demolished during the year :—				
1910	15 ,,	,,		
1911				
1912				

—	1910.	1911.	1912.
Number of Private Latrines	2		
Average number of pails of nightsoil removed daily...	4		
Average number of soiled pails removed and clean pails substituted ...	—		
Number of nightsoil men employed to clean latrines and remove excreta	2		
Number of cesspools	1		
Number of cesspools cleansed	—		
Number of new cesspools constructed during the year	1		
Number of old cesspools abolished	1		
Number of cesspools oiled regularly by department	—		

9. REMOVAL OF REFUSE.

——	1910.	1911.	1912.
Number of dustbins			
Number of carts (if employed) at work daily to remove refuse from streets			
Amount of refuse removed daily from streets			
Number of carts (if employed) at work daily to remove refuse from yards and premises			
Amount of refuse removed daily from yards and premises			
Number of men employed for moving refuse			

10. MODE OF DISPOSAL OF EXCRETA, REFUSE, AND OFFAL.

——	Daily average number of pails of excreta.			Daily average number of cartloads of refuse.			Daily average number of cartloads of Slaughter House and Market Offal.		
	1910.	1911.	1912.	1910.	1911.	1912.	1910.	1911.	1912.
Buried or trenched									
Burnt									
Thrown into sea									
*Otherwise dealt with									

* State mode of disposal.

11. AVERAGE DAILY NUMBER OF CARTLOADS OF TIN CANS, BOTTLES, BROKEN CROCKERY AND OTHER INCOMBUSTIBLE MATERIAL REMOVED FROM HOUSES, HUTS AND COMPOUNDS.

1910.	1911.	1912.

12. WATER SUPPLY.

Nature of Water Supply.	1910.	1911.	1912.
Pipe-borne water :—			
Source (river, lake or spring) :—			
Number of linear yards	*nil*		
Number of stand pipes along roads			
Number of stand pipes in compounds and houses ...			
Wells : —			
Public :—			
Number	*nil*		
Number with pumps protected against surface water and mosquito-protected			
Private :—			
Number	1		
Number protected against surface water and mosquito-protected			
Tanks :—			
Public :—			
Number underground	*nil*		
Number mosquito-protected and served by pumps ...			
Number above ground			
Number mosquito-protected			
Number of 400 gallons capacity or less			
Number above 400 gallons			

———	1910.	1911.	1912.
Tanks:—			
Private :—			
Number underground	*nil*		
Number mosquito-protected			
Number above ground			
Number mosquito-protected			
Number of 400 gallons capacity or less			
Number above 400 gallons...			
Nature of tanks :—			
Wood	*nil*		
Iron			
Concrete			
Barrels :—			
Number			
Number mosquito-protected			

13. DRAINAGE.

Nature of Drainage.	Public.	Private.
Masonry drains :—		
Linear yards of masonry drains :—		
1910	*nil*	
1911		
1912		
Linear yards reconstructed during the year :—		
1910	*nil*	
1911		
1912		
Linear yards repaired during the year :—		
1910	*nil*	
1911		
1912		
Linear yards of new drains constructed during the year :—		
1910	*nil*	
1911		
1912		
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—		
1910	3,000	
1911		
1912		
Number of linear yards of ditches dug and graded :—		
1910		
1911		
1912		
Average frequency of clearing ditches of grass :—		
1910	Monthly.	
1911		
1912		

14. CLEARANCE OF UNDERGROWTH, LONG GRASS AND JUNGLE.

———	1910.	1911.	1912.
Number of square yards of weeds, grass and vegetation cut and removed	25,000		
Average frequency of clearance of rank vegetation on same area	Monthly.		

15. Excavations and Low-lying Land.

	1910.	1911.	1912.
Number of pools and excavations	2		
Number of excavations filled up	2		
Amount of low-lying and marsh land raised and drained			
Number of pools, marshes, streams, &c., fish-stocked			
Number of cubic yards of material used for filling up pools and excavations	2,000		
Number of persons fined for making new excavations			
Average number of men daily employed in filling up pools, &c. ...			

16. Oiling.

	1910.	1911.	1912.
Number of drains oiled			
Number of pools and excavations oiled			
Number of tanks and barrels oiled			
Average number of men daily employed for oiling drains, pools, and watertanks or barrels			

17. Inspections and Prosecutions.

	1910.	1911.	1912.
Number of inspectors employed			
Number of houses inspected			
Number of houses where larvæ were found			
Number of notices served to remove conditions causing the breeding of larvæ			
Number of persons fined for having mosquito larvæ on premises			
Number of notices served to remove insanitary conditions on premises			
Number of persons fined for not removing insanitary conditions after notice	31		
Number of soda and aerated water factories inspected			

(Sgd.) R. MUGLISTON.

GOLD COAST.

No.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR IN THE TOWN.

1. Name of Town: CAPE COAST.

——	Approximate area.	Number of proclaimed open spaces.
1910	650 acres.	3
1911		
1912		

2. Population.

——	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910	10,071	9,929	55	14	20,069
1911					
1912					

3. Housing.

——	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses :—		
1910	15	2,283
1911		
1912		

Number of Huts :—	
1910	477
1911	
1912	

4. Mosquito Protection of Houses.

——	1910.	1911.	1912.
Number of European houses wholly mosquito protected	none.		
Number of European houses with mosquito room	2		
Number rendered during the year wholly mosquito protected ...	none.		
Number rendered during the year partially mosquito protected ...	2		

5. Erection of New Buildings during the Year.

——	1910.	1911.	1912.
Number of public buildings erected with sanction as to site, construction, and relation to other buildings			
Number of houses erected with sanction as to site, construction, and relation to other buildings	20		
Number of huts erected with sanction as to site, construction, and relation to other buildings			
Number of houses built without sanction			
Number of huts built without sanction			

ACTION TAKEN :—

—	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910				
1911				
1912				

6. MARKETS.

—	Total number.	Number paved and drained.	Number unpaved.
1910	4	1	3
1911			
1912			

7. SLAUGHTER-HOUSES.

—	Total number.	Number paved and drained.	Number unpaved.
1910	1	1	—
1911			
1912			

8. LATRINES.

—	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—				
1910	22	161	19	150
1911				
1912				
Number of new Public Latrines erected during the year :—				
1910	1	8	1	8
1911				
1912				
Number of Public Latrines repaired during the year :—				
1910	3	24	3	24
1911				
1912				
Number of Public Latrines demolished during the year :—				
1910				
1911				
1912				

—	1910.	1911.	1912.
Number of Private Latrines	395		
Average number of pails of nightsoil removed daily	673		
Average number of soiled pails removed and clean pails substituted	673		
Number of nightsoil men employed to clean latrines and remove excreta	28		
Number of cesspools	10		
Number of cesspools cleansed	—		
Number of new cesspools constructed during the year	—		
Number of old cesspools abolished	89		
Number of cesspools oiled regularly by Department	—		

9. REMOVAL OF REFUSE.

——	1910.	1911.	1912.
Number of dustbins	63		
Number of carts (if employed) at work daily to remove refuse from streets	12		
Amount of refuse removed daily from streets	19 $\frac{1}{10}$ tons.		
Number of carts (if employed) at work daily to remove refuse from yards and premises	—		
Amount of refuse removed daily from yards and premises	—		
Number of men employed for moving refuse	36		

10. MODE OF DISPOSAL OF EXCRETA, REFUSE AND OFFAL.

——	Daily average number of pails of excreta.			Daily average number of cartloads of refuse.			Daily average number of cartloads of Slaughter House and Market Offal.		
	1910.	1911.	1912.	1910.	1911.	1912.	1910.	1911.	1912.
Buried or trenched	—			—			—		
Burnt	—			121			8		
Thrown into sea	673			—			—		
*Otherwise dealt with	—			—			—		

* State mode of disposal.

11. AVERAGE DAILY NUMBER OF CARTLOADS OF TIN CANS, BOTTLES, BROKEN CROCKERY AND OTHER INCOMBUSTIBLE MATERIAL REMOVED FROM HOUSES, HUTS AND COMPOUNDS.

1910.	1911.	1912.

12 WATER SUPPLY.

Nature of Water Supply.	1910.	1911.	1912.
Pipe-borne water :—			
Source (river, lake or spring) :—			
Number of linear yards	—		
Number of stand pipes along roads	—		
Number of stand pipes in compounds and houses ...	—		
Wells :—			
Public :—			
Number	6		
Number with pumps protected against surface water and mosquito-protected	3		
Private :—			
Number	266		
Number protected against surface water and mosquito-protected	266		
Tanks :—			
Public :—			
Number underground	10		
Number mosquito-protected and served by pumps ...	6		
Number above ground	6		
Number mosquito-protected	16		
Number of 400 gallons capacity or less	—		
Number above 400 gallons	16		

——	1910.	1911.	1912.
Tanks :—			
Private ;—			
Number underground	49		
Number mosquito-protected	49		
Number above ground	121		
Number mosquito-protected	121		
Number of 400 gallons capacity or less	12		
Number above 400 gallons	158		
Nature of tanks :—			
Wood	8		
Iron	113		
Concrete	49		
Barrels :—			
Number	1106		
Number mosquito-protected	1106		

13. DRAINAGE.

Nature of Drainage.	Public.	Private.
Masonry drains :—		
Linear yards of masonry drains :—		
1910		
1911		
1912		
Linear yards reconstructed during the year :—		
1910		
1911		
1912		
Linear yards repaired during the year :—		
1910		
1911		
1912		
Linear yards of new drains constructed during the year :—		
1910	1,418 lin. yds.	
1911		
1912		
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—		
1910	10,505	
1911		
1912		
Number of linear yards of ditches dug and graded :—		
1910		
1911		
1912		
Average frequency of clearing ditches of grass :—		
1910	4	
1911		
1912		

14. CLEARANCE OF UNDERGROWTH, LONG GRASS AND JUNGLE.

——	1910.	1911.	1912.
Number of square yards of weeds, grass, and vegetation cut and removed	312,208		
Average frequency of clearance of rank vegetation on same area ...	4		

15. EXCAVATIONS AND LOW-LYING LAND.

——	1910.	1911.	1912.
Number of pools and excavations	76		
Number of excavations filled up	72		
Amount of low-lying and marsh land raised and drained	889 sq. yds.		
Number of pools, marshes, streams, &c., fish-stocked...	1		
Number of cubic yards of material used for filling up pools and excavations	563		
Number of persons fined for making new excavations	—		
Average number of men daily employed in filling up pools, &c. ...	2		

16. OILING.

——	1910.	1911.	1912.
Number of drains oiled	93		
Number of pools and excavations oiled	77		
Number of tanks and barrels oiled	9,972		
Average number of men daily employed for oiling drains, pools, and watertanks or barrels	4		

17. INSPECTIONS AND PROSECUTIONS.

——	1910.	1911.	1912.
Number of inspectors employed	6		
Number of houses inspected	13,550		
Number of houses where larvæ were found	2,050		
Number of notices served to remove conditions causing the breeding of larvæ	1,261		
Number of persons fined for having mosquito larvæ on premises ...	96		
Number of notices served to remove insanitary conditions on premises	1,673		
Number of persons fined for not removing insanitary conditions after notice	53		
Number of soda and aerated water factories inspected	1		

(Sgd.) R. AKIWANDE SAVAGE, M.O.H.

GOLD COAST.

No.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR IN THE TOWN.

1. Name of Town: COOMASSIE.

----	Approximate area.	Number of proclaimed open spaces.
1910	About 1 sq. mile... ...	11
1911		
1912		

2. Population.

—	Number of Natives.		Number of Europeans.		Syrians.		Total.
	Males.	Females.	Males.	Females.	Males.	Females	
1910	5,161	5,315	108	3	17	6	10,607
1911							
1912							

3. Housing.

—	Number occupied by Europeans.	Number occupied by Natives.	Syrians.
Number of Houses:—			
1910	42	708	6
1911			
1912			

Number of Huts:—	
1910	499
1911	
1912	

4 Mosquito Protection of Houses.

----	1910.	1911.	1912.
Number of European houses wholly mosquito protected	*nil*		
Number of European houses with mosquito room	1		
Number rendered during the year wholly mosquito protected ...	*nil*		
Number rendered during the year partially mosquito protected ...	*nil*		

5. Erection of New Buildings during the Year.

—	1910.	1911.	1912.
Number of public buildings erected with sanction as to site, construction, and relation to other buildings	1		
Number of houses erected with sanction as to site, construction, and relation to other buildings	110		
Number of huts erected with sanction as to site, construction, and relation to other buildings	*nil*		
Number of houses built without sanction	*nil*		
Number of huts built without sanction	*nil*		

Action Taken:—

—	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910	*nil*	*nil*	52	*nil*
1911				
1912				

6. Markets.

—	Total Number.	Number paved and drained.	Number unpaved.
1910	1	*nil*	1
1911			
1912			

7. Slaughter-houses.

—	Total Number.	Number paved and drained.	Number unpaved.
1910	1	1	*nil*
1911			
1912			

8. Latrines.

—	For Males.		For Females.	
	Number.	Number of Seats.	Number.	Number of Seats.
Number of Public Latrines :—				
1910	27	170	27	170
1911				
1912				
Number of new Public Latrines erected during the year :—				
1910	*nil*			
1911				
1912				
Number of Public Latrines repaired during the year :—				
1910	3			
1911				
1912				
Number of Public Latrines demolished during the year :—				
1910	*nil*			
1911				
1912				

—	1910.	1911.	1912.
Number of Private Latrines	14		
Average number of pails of nightsoil removed daily	208		
Average number of soiled pails removed and clean pails substituted ...	320 & 340		
Number of nightsoil men employed to clean latrines and remove excreta	60		
Number of cesspools	*nil*		
Number of cesspools cleansed	,,		
Number of new cesspools constructed during the year	,,		
Number of old cesspools abolished	,,		
Number of cesspools oiled regularly by Department	,,		

9. REMOVAL OF REFUSE.

—	1910.	1911.	1912.
Number of dustbins	2		
Number of carts (if employed) at work daily to remove refuse from streets	3		
Amount of refuse removed daily from streets	160 wheel-barrows		
Number of carts (if employed) at work daily to remove refuse from yards and premises	*nil*		
Amount of refuse removed daily from yards and premises	2 baskets each yd.		
Number of men employed for moving refuse	20 daily.		

10. MODE OF DISPOSAL OF EXCRETA, REFUSE, AND OFFAL.

—	Daily average number of pails of excreta.			Daily average number of cartloads of refuse.			Daily average number of cartloads of Slaughter House and Market Offal.		
	1910.	1911.	1912.	1910.	1911.	1912.	1910.	1911.	1912.
Buried or trenched	208			50			6 Buckets trenched.		
Burnt									
Thrown into sea									
*Otherwise dealt with									

* State mode of disposal.

11. AVERAGE DAILY NUMBER OF CARTLOADS OF TIN CANS, BOTTLES, BROKEN CROCKERY AND OTHER INCOMBUSTIBLE MATERIAL REMOVED FROM HOUSES, HUTS AND COMPOUNDS.

1910.	1911.	1912.
2 Cartloads		

12. WATER SUPPLY.

Nature of Water Supply.	1910.	1911.	1912.
Pipe-borne water :—			
Source (river, lake or spring) :—			
Number of linear yards	*nil*		
Number of stand pipes along roads	,,		
Number of stand pipes in compounds and houses ...	,,		
Wells :—			
Public :—			
Number	11		
Number with pumps protected against surface water and mosquito-protected	9		
Private :—			
Number	66		
Number protected against surface water and mosquito-protected	2		
Tanks :—			
Public :—			
Number underground	*nil*		
Number mosquito-protected and served by pumps ...	,,		
Number above ground	,,		
Number mosquito-protected	,,		
Number of 400 gallons capacity or less	,,		
Number above 400 gallons	,,		

———	1910.	1911.	1912.
Tanks :—			
Private :—			
Number under ground	2		
Number mosquito-protected	2		
Number above ground	20		
Number mosquito-protected	20		
Number of 400 gallons capacity or less	*nil*		
Number above 400 gallons	22		
Nature of tanks :—			
Wood	5		
Iron	15		
Concrete	2		
Barrels :—			
Number	68		
Number mosquito-protected	68		

13. DRAINAGE.

Nature of drainage.	Public.	Private.
Masonry drains :—		
Linear yards of masonry drains :—		
1910	591 yards	
1911		
1912		
Linear yards reconstructed during the year :—		
1910	120 „	
1911		
1912		
Linear yards repaired during the year :—		
1910	*nil*	
1911		
1912		
Linear yards of new drains constructed during the year :—		
1910	„	
1911		
1912		
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—		
1910	137, 182, 803	
1911		
1912		
Number of linear yards of ditches dug and graded :—		
1910	411	
1911		
1912		
Average frequency of clearing ditches of grass :—		
1910	Monthly	
1911		
1912		

14. CLEARANCE OF UNDERGROWTH, LONG GRASS, AND JUNGLE.

———	1910.	1911.	1912.
Number of square yards of weeds, grass, and vegetation cut and removed	Average 1,904,665		
Average frequency of clearance of rank vegetation on same area ...	Monthly		

15. EXCAVATIONS AND LOW-LYING LAND.

——	1910.	1911.	1912.
Number of pools and excavations	80		
Number of excavations filled up	30		
Amount of low-lying and marsh land raised and drained... ...	100 sq. yds.		
Number of pools, marshes, streams, &c., fish-stocked	*nil*		
Number of cubic yards of material used for filling up pools and excavations	5 cartloads.		
Number of persons fined for making new excavations	1		
Average number of men daily employed in filling up pools, &c. ...	4		

16. OILING.

——	1910.	1911.	1912.
Number of drains oiled	8 daily.		
Number of pools and excavations oiled	80 ,,		
Number of tanks and barrels oiled	6		
Average number of men daily employed for oiling drains, pools, and watertanks or barrels	1		

17. INSPECTIONS AND PROSECUTIONS.

——	1910.	1911.	1912.
Number of inspectors employed	1		
Number of houses inspected	6,483		
Number of houses where larvæ were found	95		
Number of notices served to remove conditions causing the breeding of larvæ	503		
Number of persons fined for having mosquito larvæ on premises ...	95		
Number of notices served to remove insanitary conditions on premises	508		
Number of persons fined for not removing insanitary conditions after notice	336		
Number of soda and aerated water factories inspected	1		

(Sgd.) C. B. HUNTER,
Ag. Pr. *M.O.*
21/1/11.

GOLD COAST.

No.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR IN THE TOWN.

1. Name of Town : GAMBAGA.

——	Approximate area.	Number of proclaimed open spaces.
1910	250,000 sq. yds.	*nil.*
1911		
1912		

2. Population.

——	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910	2000		2	1	
1911					
1912					

3. Housing.

——	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses :—		
1910	2	150 Compounds.
1911		
1912		

Number of Huts :—
1910 ... ...
1911 ... ...
1912 ... ...

4. Mosquito Protection of Houses.

——	1910.	1911	1912.
Number of European houses wholly mosquito protected	*nil.*		
Number of European houses with mosquito room			
Number rendered during the year wholly mosquito protected ...			
Number rendered during the year partially mosquito protected ...			

5. Erection of New Buildings during the Year.

——	1910.	1911.	1912.
Number of public buildings erected with sanction as to site, construction, and relation to other buildings	*nil.*		
Number of houses erected with sanction as to site, construction, and relation to other buildings			
Number of huts erected with sanction as to site, construction, and relation to other buildings			
Number of houses built without sanction			
Number of huts built without sanction			

ACTION TAKEN :—

—	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910	67	—	15	2
1911				
1912				

6. MARKETS.

—	Total Number.	Number paved and drained.	Number unpaved.
1910	1		1
1911			
1912			

7. SLAUGHTER-HOUSES.

—	Total Number.	Number paved and drained.	Number unpaved.
1910	*nil*	*nil*	*nil*
1911			
1912			

8. LATRINES,

—	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—				
1910	16		16	
1911				
1912				
Number of new Public Latrines erected during the year :—				
1910	16		16	
1911				
1912				
Number of Public Latrines repaired during the year :—				
1910	*nil*			
1911				
1912				
Number of Public Latrines demolished during the year :—				
1910	*nil*			
1911				
1912				

—	1910.	1911.	1912.
Number of Private Latrines	4		
Average number of pails of nightsoil removed daily	4		
Average number of soiled pails removed and clean pails substituted ...	4		
Number of nightsoil men employed to clean latrines and remove excreta ...	4		
Number of cesspools	*nil*		
Number of cesspools cleansed			
Number of new cesspools constructed during the year			
Number of old cesspools abolished			
Number of cesspools oiled regularly by Department...			

9. REMOVAL OF REFUSE.

—	1910.	1911.	1912.
Number of dustbins			
Number of carts (if employed) at work daily to remove refuse from streets			
Amount of refuse removed daily from streets			
Number of carts (if employed) at work daily to remove refuse from yards and premises.			
Amount of refuse removed daily from yards and premises			
Number of men employed for moving refuse			

10. MODE OF DISPOSAL OF EXCRETA, REFUSE AND OFFAL.

—	Daily average number of pails of excreta.			Daily average number of cartloads. of refuse.			Daily average number of cartloads of Slaughter House and Market Offal.		
	1910.	1911.	1912.	1910.	1911.	1912.	1910.	1911.	1912.
Buried or trenched	4								
Burnt									
Thrown into sea									
*Otherwise dealt with									

* State mode of disposal.

11. AVERAGE DAILY NUMBER OF CARTLOADS OF TIN CANS, BOTTLES, BROKEN CROCKERY AND OTHER INCOMBUSTIBLE MATERIAL REMOVED FROM HOUSES, HUTS AND COMPOUNDS.

1910.	1911.	1912.

12. WATER SUPPLY.

Nature of Water Supply.	1910.	1911.	1912.
Pipe-borne water :—			
Source (river, lake or spring) :—			
Number of linear yards			
Number of stand pipes along roads			
Number of stand pipes in compounds and houses ...			
Wells :—			
Public :—			
Number	3		
Number with pumps protected against surface water and mosquito protected	nil		
Private :—			
Number			
Number protected against surface water and mosquito-protected			
Tanks :—			
Public :—			
Number under ground			
Number mosquito-protected and served by pumps... ...			
Number above ground			
Number mosquito-protected			
Number of 400 gallons capacity or less			
Number above 400 gallons			

——	1910.	1911.	1912.
Tank :—			
Private :—			
Number under ground			
Number mosquito-protected			
Number above ground			
Number mosquito-protected			
Number of 400 gallons capacity or less			
Number above 400 gallons			
Nature of tanks :—			
Wood			
Iron			
Concrete			
Barrels :—			
Number			
Number mosquito-protected			

13. Drainage.

Nature of Drainage.	Public.	Private.
Masonry drains :—		
Linear yards of masonry drains :—		
1910		
1911		
1912		
Linear yards reconstructed during the year :—		
1910		
1911		
1912		
Linear yards repaired during the year :—		
1910		
1911		
1912		
Linear yards of new drains constructed during the year :—		
1910		
1911		
1912		
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—	Not estimated.	
1910		
1911		
1912		
Number of linear yards of ditches dug and graded :—	*nil.*	
1910		
1911		
1912		
Average frequency of clearing ditches of grass :—	Thrice.	
1910		
1911		
1912		

14. Clearance of Undergrowth, Long Grass and Jungle.

——	1910.	1911.	1912.
Number of square yards of weeds, grass and vegetation cut and removed	?		
Average frequency of clearance of rank vegetation on same area ...	Thrice.		

15. Excavations and low-lying land.

——	1910.	1911.	1912.
Number of pools and excavations			
Number of excavations filled up			
Amount of low-lying and marsh land raised and drained			
Number of pools, marshes, streams, &c., fish-stocked			
Number of cubit yards of material used for filling up pools and excavations			
Number of persons fined for making new excavations			
Average number of men daily employed in filling up pools, &c. ...			

16. Oiling.

——	1910.	1911.	1912.
Number of drains oiled			
Number of pools and excavations oiled			
Number of tanks and barrels oiled			
Average number of men daily employed for oiling drains, pools, and watertanks or barrels			

17. Inspections and Prosecutions.

——	1910.	1911.	1912.
Number of inspectors employed	*nil.*		
Number of houses inspected			
Number of houses where larvæ were found	13		
Number of notices served to remove conditions causing the breeding of larvæ			
Number of persons fined for having mosquito larvæ on premises ...	13		
Number of notices served to remove insanitary conditions on premises			
Number of persons fined for not removing insanitary conditions after notice	67		
Number of soda and aerated water factories inspected	*nil.*		

(Sgd.) ALEX. LUNDIE, *M.O.*,
Gambaga.

31*st January*, 1911.

GOLD COAST.

No.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR IN THE TOWN.

1. NAME OF TOWN : KINTAMPO, N.T.A.

——	Approximate area.	Number of proclaimed open spaces.
1910		
1911		
1912		

2. POPULATION (FLOATING).

——	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910			26	1	27
1911					
1912					

3. HOUSING.

——	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses :—		
1910	7	
1911		
1912		

Number of Huts :—
1910 ... ...
1911 ... ...
1912 ... ...

4. MOSQUITO PROTECTION OF HOUSES.

——	1910.	1911.	1912.
Number of European houses wholly mosquito protected ... ... Number of European houses with mosquito room ... ... Number rendered during the year wholly mosquito protected ... Number rendered during the year partially mosquito protected ...	*nil*		

5. ERECTION OF NEW BUILDINGS DURING THE YEAR.

——	1910.	1911.	1912.
Number of public buildings erected with sanction as to site, construction, and relation to other buildings	3		
Number of houses erected with sanction as to site, construction, and relation to other buildings			
Number of huts erected with sanction as to site, construction, and relation to other buildings			
Number of houses built without sanction			
Number of huts built without sanction			

Action taken :—

—	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910		40		
1911				
1912				

6. Markets.

—	Total number.	Number paved and drained.	Number unpaved.
1910	1	*nil.*	1
1911			
1912			

7. Slaughter-houses.

—	Total number.	Number paved and drained.	Number unpaved.
1910	*nil.*	*nil.*	*nil.*
1911			
1912			

8. Latrines.

—	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—				
1910				
1911				
1912				
Number of new Public Latrines erected during the year :—				
1910				
1911				
1912				
Number of Public Latrines repaired during the year :—				
1910				
1911				
1912				
Number of Public Latrines demolished during the year :—				
1910				
1911				
1912				

—	1910.	1911.	1912.
Number of Private Latrines	7		
Average number of pails of nightsoil removed daily...	8		
Average number of soiled pails removed and clean pails substituted	4		
Number of nightsoil men employed to clean latrines and remove excreta...	1		
Number of cesspools	*nil.*		
Number of cesspools cleansed	"		
Number of new cesspools constructed during the year	"		
Number of old cesspools abolished	"		
Number of cesspools oiled regularly by Department	"		

9. REMOVAL OF REFUSE.

———	1910.	1911.	1912.
Number of dustbins	*nil.*		
Number of carts (if employed) at work daily to remove refuse from streets	”		
Amount of refuse removed daily from streets	”		
Number of carts (if employed) at work daily to remove refuse from yards and premises	”		
Amount of refuse removed daily from yards and premises	”		
Number of men employed for moving refuse...	”		

10. MODE OF DISPOSAL OF EXCRETA, REFUSE, AND OFFAL.

———	Daily average number of pails of excreta.			Daily average number of cartloads of refuse.			Daily average number of cartloads of Slaughter House and Market Offal.		
	1910.	1911.	1912.	1910.	1911.	1912.	1910.	1911.	1912.
Buried or trenched	8								
Burnt	*nil.*								
Thrown into sea	”								
*Otherwise dealt with	”								

* State mode of disposal.

11. AVERAGE DAILY NUMBER OF CARTLOADS OF TIN CANS, BOTTLES, BROKEN CROCKERY AND OTHER INCOMBUSTIBLE MATERIAL REMOVED FROM HOUSES, HUTS AND COMPOUNDS.

1910.	1911.	1912.
Not recorded		

12. WATER SUPPLY.

Nature of Water Supply.	1910.	1911.	1912.
Pipe-borne water :—			
Source (river, lake or spring) :—			
Number of linear yards	*nil.*		
Number of stand pipes along roads			
Number of stand pipes in compounds and houses			
Wells :—			
Public :—			
Number	*nil.*		
Number with pumps protected against surface water and mosquito-protected.			
Private :—			
Number	*nil.*		
Number protected against surface water and mosquito-protected.			
Tanks :—			
Public :—			
Number underground	*nil.*		
Number mosquito-protected and served by pumps ...			
Number above ground			
Number mosquito-protected			
Number of 400 gallons capacity or less			
Number above 400 gallons...			

———	1910.	1911.	1912.
Tanks :—			
Private :—			
Number underground	nil		
Number mosquito-protected			
Number above ground			
Number mosquito-protected...			
Number of 400 gallons capacity or less			
Number above 400 gallons...			
Nature of tanks :—			
Wood	nil		
Iron			
Concrete			
Barrels :—			
Number	nil		
Number mosquito-protected...			

13. DRAINAGE.

Nature of drainage.	Public.	Private.
Masonry drains :—		
Linear yards of masonry drains :—		
1910	nil	nil
1911		
1912		
Linear yards reconstructed during the year :—		
1910	nil	nil
1911		
1912		
Linear yards repaired during the year :—		
1910	nil	nil
1911		
1912		
Linear yards of new drains constructed during the year :—		
1910	nil	nil
1911		
1912		
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—		
1910	Not recorded.	
1911		
1912		
Number of linear yards of ditches dug and graded :—		
1910	Not recorded.	
1911		
1912		
Average frequency of clearing ditches of grass :—		
1910		
1911		
1912		

14. CLEARANCE OF UNDERGROWTH, LONG GRASS, AND JUNGLE.

———	1910.	1911.	1912.
Number of square yards of weeds, grass, and vegetation cut and removed.			
Average frequency of clearance of rank vegetation on same area ...			

15. EXCAVATIONS AND LOW LYING LAND.

———	1910.	1911.	1912.
Number of pools and excavations	*nil*		
Number of excavations filled up	”		
Amount of low-lying and marsh land raised and drained	”		
Number of pools, marshes, streams, &c., fish-stocked	”		
Number of cubic yards of material used for filling up pools and excavations	”		
Number of persons fined for making new excavations	”		
Average number of men daily employed in filling up pools, &c. ...	”		

16. OILING.

———	1910.	1911.	1912.
Number of drains oiled	*nil*		
Number of pools and excavations oiled			
Number of tanks and barrels oiled			
Average number of men daily employed for oiling drains, pools, and watertanks or barrels			

17. INSPECTIONS AND PROSECUTIONS.

———	1910.	1911.	1912.
Number of inspectors employed	*nil*		
Number of houses inspected			
Number of houses where larvæ were found			
Number of notices served to remove conditions causing the breeding of larvæ			
Number of persons fined for having mosquito larvæ on premises ...	”		
Number of notices served to remove insanitary conditions on premises			
Number of persons fined for not removing insanitary conditions after notice			
Number of soda or aërated water factories inspected	”		

(SGD.) A. J. SMITH, *M.O.*

GOLD COAST.

No.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR IN THE TOWN.

1. Name of Town : OBUASI.

—	Approximate area.	Number of proclaimed open spaces.
1910	4 sq. miles	1
1911		
1912		

2. Population.

—	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910	9,000		140	2	9,142
1911					
1912					

3. Housing.

—	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses :—		
1910	7	*nil.*
1911		
1912		

Number of Huts :—	
1910	1,000
1911	
1912	

4. Mosquito Protection of Houses.

—	1910.	1911.	1912.
Number of European houses wholly mosquito protected	*nil.*		
Number of European houses with mosquito room			
Number rendered during the year wholly mosquito protected ...			
Number rendered during the year partially mosquito protected ...			

5. Erection of New Buildings during the Year.

—	1910.	1911.	1912.
Number of public buildings erected with sanction as to site, construction and relation to other buildings	3		
Number of houses erected with sanction as to site, construction and relation to other buildings	*nil.*		
Number of huts erected with sanction as to site, construction and relation to other buildings			
Number of houses built without sanction			
Number of huts built without sanction			

Action Taken:—

—	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910	*nil.*	*nil.*	40	*nil.*
1911				
1912				

6. Markets.

—	Total number.	Number paved and drained.	Number unpaved.
1910	1	1	*nil.*
1911			
1912			

7. Slaughter-Houses.

—	Total number.	Number paved and drained.	Number unpaved.
1910	1	1	*nil.*
1911			
1912			

8. Latrines.

—	For Males.		For Females.	
	Number.	Number of Seats.	Number.	Number of seats.
Number of Public Latrines :—				
1910	6	30	6	30
1911				
1912				
Number of New Public Latrines erected during the year :—				
1910	1	6	1	6
1911				
1912				
Number of Public Latrines repaired during the year :—				
1910	*nil.*		*nil.*	
1911				
1912				
Number of Public Latrines demolished during the year :—				
1910	1		1	
1911				
1912				

——	1910.	1911.	1912.
Number of Private Latrines	12		
Average number of pails of nightsoil removed daily...	132		
Average number of soiled pails removed and clean pails substituted ...	132		
Number of nightsoil men employed to clean latrines and remove excreta ...	13		
Number of cesspools	*nil.*		
Number of cesspools cleansed			
Number of new cesspools constructed during the year			
Number of old cesspools abolished			
Number of cesspools oiled regularly by Department...			

9. Removal of Refuse.

——	1910.	1911.	1912.
Number of dustbins	*nil*		
Number of carts (if employed) at work daily to remove refuse from streets			
Amount of refuse removed daily from streets	100 H. L.		
Number of carts (if employed) at work daily to remove refuse from yards and premises	*nil*		
Amount of refuse removed daily from yards and premises	1,500 H. L.		
Number of men employed for moving refuse	15		

10. Mode of Disposal of Excreta, Refuse, and Offal.

——	Daily average number of pails of excreta.			Daily average number of H. L. of refuse.			Daily average number of H. L. of Slaughter House and Market Offal.		
	1910.	1911.	1912.	1910.	1911.	1912.	1910.	1911.	1912.
Buried or trenched	132								
Burnt				1,600			10		
Thrown into sea									
*Otherwise dealt with									

* State mode of disposal.

11. Average Daily Number of Cartloads of Tin Cans, Bottles, Broken Crockery and other incombustible Material, removed from Houses, Huts and Compounds.

1910.	1911.	1912.
nil		

12. Water Supply.

Nature of Water Supply.	1910.	1911.	1912.
Pipe-borne water :—			
Source (river, lake or spring) :—	Spring		
Number of linear yards			
Number of stand pipes along roads...	12		
Number of stand pipes in compounds and houses	*nil*		
Wells :—			
Public :—			
Number	*nil*		
Number with pumps protected against surface water and mosquito-protected			
Private :—			
Number	1		
Number protected against surface water and mosquito-protected	*nil*		
Tanks :—			
Public :—			
Number underground	*nil*		
Number mosquito-protected and served by pumps ...			
Number above ground			
Number mosquito-protected			
Number of 400 gallons capacity or less			
Number above 400 gallons			

——	1910.	1911.	1912.
Tanks :—			
Private :—			
Number underground	*nil*		
Number mosquito-protected	*nil*		
Number above ground	11		
Number mosquito-protected	11		
Number of 400 gallons capacity or less	8		
Number above 400 gallons	3		
Nature of tanks :—			
Wood			
Iron	Iron		
Concrete			
Barrels :—			
Number	*nil*		
Number mosquito-protected			

13. DRAINAGE.

Nature of Drainage.	Public.	Private.
Masonry drains :—		
Linear yards of masonry drains :—		
1910	122 yards	*nil*
1911		
1912		
Linear yards reconstructed during the year :—		
1910	*nil*	*nil*
1911		
1912		
Linear yards repaired during the year :—		
1910	*nil*	*nil*
1911		
1912		
Linear yards of new drains constructed during the year :—		
1910	132 yards	*nil*
1911		
1912		
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—		
1910	24,200	*nil*
1911		
1912		
Number of linear yards of ditches dug and graded :—		
1910	*nil*	*nil*
1911		
1912		
Average frequency of clearing ditches of grass :—		
1910	monthly	
1911		
1912		

14. CLEARANCE OF UNDERGROWTH, LONG GRASS, AND JUNGLE.

——	1910.	1911.	1912.
Number of square yards of weeds, grass, and vegetation cut and removed	1,454,511		
Average frequency of clearance of rank vegetation on same area ...	monthly		

15. EXCAVATIONS AND LOW-LYING LAND.

——	1910.	1911.	1912.
Number of pools and excavations	79		
Number of excavations filled up	79		
Amount of low-lying and marsh land raised and drained ...	*nil*		
Number of pools, marshes, streams, &c., fish-stocked	*nil*		
Number of head loads of material used for filling up pools and excavations	24,910		
Number of persons fined for making new excavations	*nil*		
Average number of men daily employed in filling up pools, &c. ...	15		

16. OILING.

——	1910.	1911.	1912.
Number of drains oiled	2,671		
Number of pools and excavations oiled			
Number of tanks and barrels oiled			
Average number of men daily employed for oiling drains, pools and watertanks or barrels	1		

17. INSPECTIONS AND PROSECUTIONS.

——	1910.	1911.	1912.
Number of inspectors employed	2		
Number of houses inspected	11,667		
Number of houses where larvæ were found	382		
Number of notices served to remove conditions causing the breeding of larvæ	272		
Number of persons fined for having mosquito larvæ on premises			
Number of notices served to remove insanitary conditions on premises...			
Number of persons fined for not removing insanitary conditions after notice			
Number of soda and aerated water factories inspected	*nil*		

(Sgd.) S. GOODBRAND,

MEDICAL OFFICER,

OBUASI.

GOLD COAST.

No.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR IN THE TOWN.

1 Name of Town: QUITTAH.

—	Approximate area.	Number of proclaimed open spaces.
1910	70 Acres.	10
1911		
1912		

2. Population.

—	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910	1,300	1,475	16	3	1,794
1911					
1912					

3. Housing.

—	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses :—		
1910	9	545
1911		
1912		

Number of Huts :—	
1910	245
1911	
1912	

4. Mosquito Protection of Houses.

—	1910.	1911.	1912.
Number of European houses wholly mosquito-protected	1		
Number of European houses with mosquito room	1		
Number rendered during the year wholly mosquito-protected ...	1		
Number rendered during the year partially mosquito-protected ...	*nil.*		

5. Erection of New Buildings during the Year.

—	1910.	1911.	1912.
Number of public buildings erected with sanction as to site, construction, and relation to other buildings	*nil.*		
Number of houses erected with sanction as to site, construction, and relation to other buildings	8		
Number of huts erected with sanction as to site, construction, and relation to other buildings	*nil.*		
Number of houses built without sanction	,,		
Number of huts built without sanction	,,		

ACTION TAKEN :—

——	Number of prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910	*nil.*	*nil.*	*nil.*	*nil.*
1911				
1912				

6. MARKETS.

——	Total number.	Number paved and drained.	Number unpaved.
1910	1	*nil.*	1
1911			
1912			

7. SLAUGHTER-HOUSES.

——	Total number.	Number paved and drained.	Number unpaved.
1910	1	*nil.*	1
1911			
1912			

8. LATRINES.

——	For Males.		For Females.	
	Number.	Number of Seats.	Number.	Number of Seats.
Number of Public Latrines :—17				
1910	9	6 in each	8	6 in each
1911				
1912				
Number of new Public Latrines erected during the year :...				
1910	*nil.*			
1911				
1912				
Number of Public Latrines repaired during the year :—				
1910	,,			
1911				
1912				
Number of Public Latrines demolished during the year :—				
1910	,,			
1911				
1912				

——	1910.	1911.	1912.
Number of Private Latrines	43		
Average number of pails of nightsoil removed daily	145		
Average number of soiled pails removed and clean pails substituted ...	145		
Number of nightsoil men employed to clean latrines and remove excreta ...	6		
Number of cesspools	*nil.*		
Number of cesspools cleansed	,,		
Number of new cesspools constructed during the year	,,		
Number of old cesspools abolished	,,		
Number of cesspools oiled regularly by Department	,,		

9. REMOVAL OF REFUSE.

——	1910.	1911.	1912.
Number of dustbins	12		
Number of carts (if employed) at work daily to remove refuse from streets	2		
Amount of refuse removed daily from streets...	6		
Number of carts (if employed) at work daily to remove refuse from yards and premises	*nil.*		
Amount of refuse removed daily from yards and premises	”		
Number of men employed for moving refuse	6		

10. MODE OF DISPOSAL OF EXCRETA, REFUSE, AND OFFAL.

——	Daily average number of pails of excreta.			Daily average number of cartloads of refuse.			Daily average number of cartloads of Slaughter House and Market offal.		
	1910.	1911.	1912.	1910.	1911.	1912.	1910.	1911.	1912.
Buried or trenched	*nil.*			28			9		
Burnt	”			*nil.*			*nil.*		
Thrown into sea	145			”			”		
*Otherwise dealt with									

* State mode of disposal.

11. AVERAGE DAILY NUMBER OF CARTLOADS OF TIN CANS, BOTTLES, BROKEN CROCKERY AND OTHER INCOMBUSTIBLE MATERIAL REMOVED FROM HOUSES, HUTS AND COMPOUNDS.

1910.	1911.	1912.
2		

12. WATER SUPPLY.

Nature of Water Supply.	1910.	1911.	1912.
Pipe-borne Water :—			
Source (river, lake or spring) :—			
Number of linear yards	*nil.*		
Number of stand pipes along roads...			
Number of stand pipes in compounds and houses			
Wells :—			
Public :—			
Number	4		
Number with pumps protected against surface water and mosquito-protected	4		
Private :—			
Number	39		
Number protected against surface water and mosquito-protected	20		
Tanks :—			
Public :—			
Number under ground	*nil.*		
Number mosquito-protected and served by pumps ...	”		
Number above ground	7		
Number mosquito-protected	7		
Number of 400 gallons capacity or less	*nil.*		
Number above 400 gallons	7		

——	1910.	1911.	1912.
Tanks :—			
Private : —			
Number under ground	2		
Number mosquito-protected	2		
Number above ground	14		
Number mosquito-protected	14		
Number of 400 gallons capacity or less	*nil.*		
Number above 400 gallons	16		
Nature of tanks :—			
Wood	*nil.*		
Iron	14		
Concrete	2		
Barrels :—			
Number	87		
Number mosquito-protected	58		

13. DRAINAGE.

Nature of Drainage.	Public.	Private.
Masonry drains :—		
Linear yards of masonry drains :—		
1910	586	
1911		
1912		
Linear yards reconstructed during the year :—		
1910	*nil.*	
1911		
1912		
Linear yards repaired during the year :—		
1910	*nil.*	
1911		
1912		
Linear yards of new drains constructed during the year :—		
1910	158	
1911		
1912		
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—		
1910	*nil.*	
1911		
1912		
Number of linear yards of ditches dug and graded :—		
1910	*nil.*	
1911		
1912		
Average frequency of clearing ditches of grass :—		
1910	*nil.*	
1911		
1912		

14. CLEARANCE OF UNDERGROWTH, LONG GRASS, AND JUNGLE.

——	1910.	1911.	1912.
Number of square yards of weeds, grass, and vegetation cut and removed	9,559		
Average frequency of clearance of rank vegetation on same area ...	5		

15. EXCAVATIONS AND LOW-LYING LAND.

—	1910.	1911.	1912.
Number of pools and excavations	23		
Number of excavations filled up	1		
Amount of low-lying and marsh land raised and drained	*nil.*		
Number of pools, marshes, streams, &c., fish-stocked...	,,		
Number of cubic yards of material used for filling up pools and excavations	3		
Number of persons fined for making new excavations	*nil.*		
Average number of men daily employed in filling up pools, &c. ...	,,		

16. OILING.

—	1910.	1911.	1912.
Number of drains oiled...	3		
Number of pools and excavations oiled	23		
Number of tanks and barrels oiled			
Average number of men daily employed for oiling drains, pools, and watertanks or barrels	2		

17. INSPECTIONS AND PROSECUTIONS.

—	1910.	1911.	1912.
Number of inspectors employed	1		
Number of houses inspected	3,382		
Number of houses where larvæ were found	216		
Number of notices served to remove conditions causing the breeding of larvæ	53		
Number of persons fined for having mosquito larvæ on premises	24		
Number of notices served to remove insanitary conditions on premises	257		
Number of persons fined for not removing insanitary conditions after notice...	33		
Number of soda and aërated water factories inspected	*nil.*		

(Sgd.) G. F. FORDE,
M.O.

GOLD COAST.

No.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR IN THE TOWN.

1. Name of Town: SALAGA, GONJA DISTRICT, N.T.

——	Approximate area.	Number of proclaimed open spaces.
1910	1½ sq. miles.	none.
1911		
1912		

2. Population.

——	Number of Natives. Approximate.		Number of Europeans.		Total
	Males.	Females.	Males.	Females.	
1910	800	1,200	2	1	2,003
1911					
1912					

3. Housing.

——	Number occupied by Europeans.	Number occupied by natives.
Number of Houses :—		
1910	2	3
1911		
1912		

Number of Huts :—	
1910	About 1000
1911	
1912	

4. Mosquito Protection of Houses.

——	1910.	1911.	1912.
Number of European houses wholly mosquito-protected	none		
Number of European houses with mosquito room			
Number rendered during the year wholly mosquito-protected ...			
Number rendered during the year partially mosquito-protected ...			

5. Erection of New Buildings During the Year.

——	1910.	1911.	1912.
Number of public buildings erected with sanction as to site, construction, and relation to other buildings	no data.		
Number of houses erected with sanction as to site, construction, and relation to other buildings			
Number of huts erected with sanction as to site, construction, and relation to other buildings			
Number of houses built without sanction			
Number of huts built without sanction			

Action Taken:—

——	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910	no data.		many	
1911				
1912				

6. Markets.

——	Total number.	Number paved and drained.	Number unpaved.
1910	1	—	1
1911			
1912			

7. Slaughter-houses.

——	Total number.	Number paved and drained.	Number unpaved.
1910	none		
1911			
1912			

8. Latrines.

——	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines (Pits):—				
1910	17		17	
1911				
1912				
Number of new Public Latrines erected during the year:—				
1910				
1911				
1912				
Number of Public Latrines repaired during the year:—				
1910				
1911				
1912				
Number of Public Latrines demolished during the year:—				
1910				
1911				
1912				

——	1910.	1911.	1912.
Number of Private Latrines	4		
Average number of pails of nightsoil removed daily	no data		
Average number of soiled pails removed and clean pails substituted ...	,,		
Number of nightsoil men employed to clean latrines and remove excreta ...	1		
Number of cesspools	none		
Number of cesspools cleansed	,,		
Number of new cesspools constructed during the year	,,		
Number of old cesspools abolished	,,		
Number of cesspools oiled regularly by Department	,,		

9. REMOVAL OF REFUSE.

——	1910.	1911.	1912.
Number of dustbins	none		
Number of carts (if employed) at work daily to remove refuse from streets	,,		
Amount of refuse removed daily from streets	no data		
Number of carts (if employed) at work daily to remove refuse from yards and premises.	none		
Amount of refuse removed daily from yards and premises	no data		
Number of men employed for moving refuse			

10. MODE OF DISPOSAL OF EXCRETA, REFUSE, AND OFFAL.

——	Daily average number of pails of excreta.			Daily average number of cartloads of refuse.			Daily average number of cartloads of Slaughter House and Market Offal.		
	1910.	1911.	1912.	1910.	1911.	1912.	1910.	1911.	1912.
Buried or trenched				2			2		
Burnt									
Thrown into sea									
*Otherwise dealt with									
Covered with earth in pit latrines ...	2								

* State mode of disposal.

11. AVERAGE DAILY NUMBER OF CARTLOADS OF TIN CANS, BOTTLES, BROKEN CROCKERY, AND OTHER INCOMBUSTIBLE MATERIAL REMOVED FROM HOUSES, HUTS AND COMPOUNDS.

1910.	1911.	1912.
No data.		

12. WATER SUPPLY.

Nature of Water Supply.	1910.	1911.	1912.
Pipe-borne water :—			
Source (river, lake or spring):—			
Number of linear yards	none		
Number of stand pipes along roads			
Number of stand pipes in compounds and houses			
Wells :—			
Public :—			
Number			
Number with pumps protected against surface water and mosquito-protected.			
Private :—			
Number	350 (about)		
Number protected and mosquito-protected.	1		
Tanks :—			
Public :—			
Number underground			
Number mosquito-protected and served by pumps ...			
Number above ground			
Number mosquito-protected			
Number of 400 gallons capacity or less			
Number above 400 gallons			

——	1910.	1911.	1912.
Tanks :—			
Private :—			
Number underground	none		
Number mosquito-protected			
Number above ground			
Number mosquito-protected			
Number of 400 gallons capacity or less			
Number above 400 gallons			
Nature of tanks :—			
Wood			
Iron			
Concrete			
Barrels :—			
Number	none		
Number mosquito-protected			

13. Drainage.

Nature of Drainage.	Public.	Private.
Masonry drains :—	none	
Linear yards of masonry drains :—		
1910		
1911		
1912		
Linear yards reconstructed during the year :—		
1910		
1911		
1912		
Linear yards repaired during the year :—		
1910		
1911		
1912		
Linear yards of new drains constructed during the year :—		
1910		
1911		
1912		
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—		
1910		
1911		
1912		
Number of linear yards of ditches dug and graded :—		
1910		
1911	no data	
1912		
Average frequency of clearing ditches of grass :—		
1910		
1911		
1912		

14. Clearance of Undergrowth, Long Grass, and Jungle.

——	1910.	1911.	1912.
Number of square yards of weeds, grass, and vegetation cut and removed	2		
Average frequency of clearance of rank vegetation on same area	2		

15. Excavations and Low-lying Land.

——	1910.	1911.	1912.
Number of pools and excavations	2		
Number of excavations filled up	2		
Amount of low-lying and marsh land raised and drained	2		
Number of pools, marshes, streams, &c., fish-stocked	None.		
Number of cubic yards of material used for filling up pools and excavations	No data.		
Number of persons fined for making new excavations	,,		
Average number of men daily employed in filling up pools, &c.	,,		

16. Oiling.

——	1910.	1911.	1912.
Number of drains oiled	No data.		
Number of pools and excavations oiled			
Number of tanks and barrels oiled			
Average number of men daily employed for oiling drains, pools, and watertanks or barrels			

17. Inspections and Prosecutions.

——	1910.	1911.	1912.
Number of inspectors employed	None.		
Number of houses inspected	No data.		
Number of houses where larvæ were found			
Number of notices served to remove conditions causing the breeding of larvæ	None.		
Number of persons fined for having mosquito larvæ on premises	No data.		
Number of notices served to remove insanitary conditions on premises			
Number of persons fined for not removing insanitary conditions after notice			
Number of soda and aërated water factories inspected	None.		

(Sgd.) G. E. H. LE FANU,
M.O., Salaga.

27th January, 1911.

GOLD COAST.

No.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR IN THE TOWN OF SALTPOND.

1. Name of Town: SALTPOND.

—	Approximate area.	Number of proclaimed open spaces.
1910	—	12
1911		
1912		

2. Population.

—	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910	About	5,000.			
1911					
1912					

3 Housing.

—	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses :—		
1910	7	226
1911		
1912		

Number of Huts :—
1910 ... ...
1911 ... ...
1912 ... ...

4. Mosquito Protection of Houses.

—	1910	1911	1912
Number of European houses wholly mosquito-protected	—		
Number of European houses with mosquito room	—		
Number rendered during the year wholly mosquito-protected ...	—		
Number rendered during the year partially mosquito-protected ...	—		

5. Erection of New Buildings during the Year.

—	1910.	1911.	1912.
Number of public buildings erected with sanction as to site, construction and relation to other buildings	—		
Number of houses erected with sanction as to site, construction, and relation to other buildings	15		
Number of huts erected with sanction as to site, construction, and relation to other buildings	—		
Number of houses built without sanction	—		
Number of huts built without sanction	—		

Action taken:

——	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910	—	—	—	1
1911				
1912				

6. Markets.

——	Total number.	Number paved and drained.	Number unpaved.
1910	1	1	
1911			
1912			

7. Slaughter-houses.

——	Total number.	Number paved and drained.	Number unpaved.
1910	—	—	—
1911			
1912			

8. Latrines.

——	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—				
1910	12	4 to 5	10	4 to 5
1911				
1912				
Number of new Public Latrines erected during the year :—				
1910	4	4 to 5	3	4 to 5
1911				
1912				
Number of Public Latrines repaired during the year :—				
1910	12	—	10	—
1911				
1912				
Number of Public Latrines demolished during the year :—				
1910	—		—	
1911				
1912				

——	1910.	1911.	1912.
Number of Private Latrines	7		
Average number of pails of nightsoil removed daily	—		
Average number of soiled pails removed and clean pails substituted ...	—		
Number of nightsoil men employed to clean latrines and remove excreta ...	10		
Number of cesspools	—		
Number of cesspools cleansed	—		
Number of new cesspools constructed during the year	—		
Number of old cesspools abolished	—		
Number of cesspools oiled regularly by department	—		

9. REMOVAL OF REFUSE.

——	1910.	1911.	1912.
Number of dustbins	13		
Number of carts (if employed) at work daily to remove refuse from streets	—		
Amount of refuse removed daily from streets	5		
Number of carts (if employed) at work daily to remove refuse from yards and premises.	—		
Amount of refuse removed daily from yards and premises	—		
Number of men employed for moving refuse...	10		

10. MODE OF DISPOSAL OF EXCRETA, REFUSE, AND OFFAL.

——	Daily average number of pails of excreta.			Daily average number of cartloads of refuse.			Daily average number of cartloads of Slaughter-House and market offal.		
	1910.	1911.	1912.	1910.	1911.	1912.	1910.	1911.	1912.
Buried or trenched	—								
Burnt	—								
Thrown into sea	all								
*Otherwise dealt with	—								

* State mode of disposal.

11.—AVERAGE DAILY NUMBER OF CARTLOADS OF TIN CANS, BOTTLES, BROKEN CROCKERY AND OTHER INCOMBUSTIBLE MATERIAL REMOVED FROM HOUSES, HUTS AND COMPOUNDS.

1910.	1911.	1912.

12.—WATER SUPPLY.

Nature of Water Supply.	1910.	1911.	1912.
Pipe-borne water :—			
Source (river, lake or spring) :—			
Number of linear yards			
Number of stand pipes along roads			
Number of stand pipes in compounds and houses			
Wells :—			
Public :—			
Number	5		
Number with pumps protected against surface water and mosquito-protected.	5		
Private :—			
Number	4		
Number protected against surface water and mosquito-protected	all		
Tanks :—			
Public :—			
Number underground	3		
Number mosquito-protected and served by pumps	3		
Number above ground	—		
Number mosquito-protected	3		
Number of 400 gallons capacity or less	*nil*		
Number above 400 gallons	3		

——	1910.	1911.	1912.
Tanks :—			
Private :—			
Number underground	5		
Number mosquito-protected	5		
Number above ground	—		
Number mosquito-protected	—		
Number of 400 gallons capacity or less	—		
Number above 400 gallons	3		
Nature of tanks :—			
Wood	—		
Iron	3		
Concrete	5		
Barrels :—			
Number	about 200		
Number mosquito-protected	all		

13. DRAINAGE.

Nature of Drainage.	Public.	Private.
Masonry drains :—		
Linear yards of masonry drains :—		
1910		
1911		
1912		
Linear yards reconstructed during the year :—		
1910		
1911		
1912		
Linear yards repaired during the year :—		
1910		
1911		
1912		
Linear yards of new drains constructed during the year :—		
1910	About 150 yards.	
1911		
1912		
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—		
1910	Lagoon 700 yards.	
1911		
1912		
Number of linear yards of ditches dug and graded :—		
1910		
1911		
1912		
Average frequency of clearing ditches of grass :—		
1910		
1911		
1912		

14. CLEARANCE OF UNDERGROWTH, LONG GRASS AND JUNGLE.

——	1910.	1911.	1912.
Number of square yards of weeds, grass and vegetation cut and removed.			
Average frequency of clearance of rank vegetation on same area			

15. Excavations and low-lying Land.

——	1910.	1911.	1912.
Number of pools and excavations	*nil*		
Number of excavations filled up			
Amount of low-lying and marsh land raised and drained			
Number of pools, marshes, streams, &c., fish-stocked			
Number of cubic yards of material used for filling up pools and excavations			
Number of persons fined for making new excavations			
Average number of men daily employed in filling up pools, &c. ..	10 men		

16. Oiling.

——	1910.	1911.	1912.
Number of drains oiled	*nil*		
Number of pools and excavations oiled			
Number of tanks and barrels oiled	4,861		
Average number of men daily employed for oiling drains, pools, and watertanks or barrels	4		

17. Inspections and Prosecutions.

——	1910.	1911.	1912.
Number of inspectors employed	4		
Number of houses inspected	10,399		
Number of houses where larvæ were found			
Number of notices served to remove conditions causing the breeding of larvæ			
Number of persons fined for having mosquito larvæ on premises ...			
Number of notices served to remove insanitary conditions on premises	about 100		
Number of persons fined for not removing insanitary conditions after notice	*nil*		
Number of soda and aërated water factories inspected	”		

(Sgd.) A. M. DOWDALL,

M.O.H.

GOLD COAST.

No.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR IN THE TOWN.

1. Name of Town : SECCONDEE.

——	Approximate area.	Number of proclaimed open spaces.
1910	4,000 acres.	4
1911		
1912		

2. Population.

	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910	8,000		145	15	8,160
1911					
1912					

3. Housing.

——	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses :—		
1910	49	118
1911		
1912		

Number of Huts :—	
1910	872
1911	
1912	

4. Mosquito Protection of Houses.

——	1910.	1911.	1912.
Number of European houses wholly mosquito-protected	—		
Number of European houses with mosquito room	5		
Number rendered during the year wholly mosquito-protected ...	—		
Number rendered during the year partially mosquito-protected ...	5		

5. Erection of New Buildings during the Year.

——	1910.	1911.	1912.
Number of public buildings erected with sanction as to site, construction, and relation to other buildings	3		
Number of houses erected with sanction as to site, construction, and relation to other buildings	31		
Number of huts erected with sanction as to site, construction, and relation to other buildings	—		
Number of houses built without sanction	—		
Number of huts built without sanction	46	probably	erected.

Action taken :—

—	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910	—	—	12	—
1911				
1912				

6. MARKETS.

—	Total number.	Number paved and drained.	Number unpaved.
1910	2	1	1
1911			
1912			

7. SLAUGHTER-HOUSES.

—	Total number.	Number paved and drained.	Number unpaved.
1910	1	1	—
1911			
1912			

8. LATRINES.

—	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—				
1910	20	120	13	40
1911				
1912				
Number of new Public Latrines erected during the year :—				
1910	2 combined M. & F.			
1911				
1912				
Number of Public Latrines repaired during the year :—				
1910	12	M. & F.		
1911				
1912				
Number of Public Latrines demolished during the year :—				
1910	1			
1911				
1912				

—	1910.	1911.	1912.
Number of Private Latrines	60		
Average number of pails of nightsoil removed daily	314		
Average number of soiled pails removed and clean pails substituted ...	—		
Number of nightsoil men employed to clean Latrines and remove excreta	12		
Number of cesspools	8		
Number of cesspools cleansed...	—		
Number of new cesspools constructed during the year	—		
Number of old cesspools abolished	2		
Number of cesspools oiled regularly by Department...	—		

9. REMOVAL OF REFUSE.

——	1910.	1911.	1912.
Number of dustbins	20		
Number of carts (if employed) at work daily to remove refuse from streets	6		
Amount of refuse removed daily from streets	26 loads		
Number of carts (if employed) at work daily to remove refuse from yards and premises	1		
Amount of refuse removed daily from yards and premises	10 loads		
Number of men employed for moving refuse	24		

10. MODE OF DISPOSAL OF EXCRETA, REFUSE AND OFFAL.

——	Daily average number of pails of excreta.			Daily average number of cartloads of refuse.			Daily average number of cartloads of Slaughter House and Market Offal.		
	1910.	1911.	1912.	1910.	1911.	1912.	1910.	1911.	1912.
Buried				3					
Burnt				36					
Thrown into sea	194								
*Otherwise dealt with									

* State mode of disposal.

11. AVERAGE DAILY NUMBER OF CARTLOADS OF TIN-CANS, BOTTLES, BROKEN CROCKERY, AND OTHER INCOMBUSTIBLE MATERIAL REMOVED FROM HOUSES, HUTS AND COMPOUNDS.

1910.	1911.	1912.
Baskets, 40		

12. WATER SUPPLY.

Nature of Water Supply.	1910.	1911.	1912.
Pipe-borne water :—			
Source (river, lake or spring) :—			
Number of linear yards			
Number of stand pipes along roads...			
Number of stand pipes in compounds and houses... ...			
Wells :—			
Public :—			
Number	5		
Number with pumps protected against surface water and mosquito-protected	5		
Private :—			
Number	173		
Number protected against surface water and mosquito-protected	141		
Tanks :—			
Public :—			
Number underground			
Number mosquito-protected and served by pumps ...			
Number above ground			
Number mosquito-protected			
Number of 400 gallons capacity or less			
Number above 400 gallons			

——	1910.	1911.	1912.
Tanks :—			
Private :—			
Number under ground	29		
Number mosquito-protected	29		
Number above ground	188		
Number mosquito-protected...	185		
Number of 400 gallons capacity or less	121		
Number above 400 gallons	96		
Nature of tanks :—			
Wood	5		
Iron	183		
Concrete	—		
Barrels :—			
Number	489		
Number mosquito-protected...	471		

13. DRAINAGE.

Nature of drainage.	Public.	Private.
Masonry drains :—		
Linear yards of masonry drains :—		
1910	4,500	400
1911		
1912		
Linear yards reconstructed during the year : —		
1910	150	
1911		
1912		
Linear yards repaired during the year :—		
1910	170	150
1911		
1912		
Linear yards of new drains constructed during the year :—		
1910	280	
1911		
1912		
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—		
1910	700	
1911		
1912		
Number of linear yards of ditches dug and graded :—		
1910		
1911		
1912		
Average frequency of clearing ditches of grass :—		
1910	Monthly	
1911		
1912		

14. CLEARANCE OF UNDERGROWTH, LONG GRASS AND JUNGLE.

——	1910.	1911.	1912.
Number of square yards of weeds, grass and vegetation cut and removed	484,000		
Average frequency of clearance of rank vegetation on same area	Undergrowth and jungle, about every 6 months. Long grass about every 6 weeks.		

15. Excavations and Low-lying Land.

——	1910.	1911.	1912.
Number of pools and excavations	6		
Number of excavations filled up	6 since June		
Amount of low-lying and marsh land raised and drained	$\frac{2}{3}$ of 2nd lagoon		
Number of pools, marshes, streams, &c., fish-stocked	40 sq. yds. on railway		
Number of cubic yards of material used for filling up pools and excavations...			
Number of persons fined for making new excavations			
Average number of men daily employed in filling up pools, &c. ...	10 routine—men on lagoon, 600.		

16. Oiling.

——	1910.	1911.	1912.
Number of drains oiled...	9 } twice weekly.		
Number of pools and excavations oiled	18 } when holding water.		
Number of tanks and barrels oiled	280		
Average number of men daily employed for oiling drains, pools, and watertanks or barrels	10		

17. Inspections and Prosecutions.

——	1910.	1911.	1912.
Number of inspectors employed	6		
Number of houses inspected	8,922		
Number of houses where larvæ were found	327		
Number of notices served to remove conditions causing the breeding of larvæ	356		
Number of persons fined for having mosquito larvæ on premises ...	162		
Number of notices served to remove insanitary conditions on premises	72		
Number of persons fined for not removing insanitary conditions after notice...	320		
Number of soda and aerated water factories inspected			

(Sgd.) J. E. MOFFATT,
M.O.H.

GOLD COAST.

No.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR IN THE TOWN.

1. NAME OF TOWN : SUNYANI.

——	Approximate area.	Number of proclaimed open spaces.
1910	2,000 yards.	
1911		
1912		

2. POPULATION.

——	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910	—	—	20	—	20
1911					
1912					

3. HOUSING.

——	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses :—		
1910	6	*nil.*
1911		
1912		

Number of Huts :—	
1910	About 150
1911	
1912	

4. MOSQUITO PROTECTION OF HOUSES.

——	1910.	1911.	1912.
Number of European houses wholly mosquito-protected	*nil.*		
Number of European houses with mosquito room	*nil.*		
Number rendered during the year wholly mosquito-protected ...	*nil.*		
Number rendered during the year partially mosquito-protected ...	*nil.*		

5. ERECTION OF NEW BUILDINGS DURING THE YEAR.

——	1910.	1911.	1912.
Number of public buildings erected with sanction as to site, construction, and relation to other buildings	1		
Number of houses erected with sanction as to site, construction and relation to other buildings	1		
Number of huts erected with sanction as to site, construction, and relation to other buildings	17		
Number of houses built without sanction	*nil.*		
Number of huts built without sanction	*nil.*		

ACTION TAKEN:

—	Number of prosecutions.		Number Demolished.	
	Huts.	Houses.	Huts.	Houses.
1910 ... ... 1911 ... ... 1912	*nil*	*nil*	11	*nil*

6. MARKETS.

—	Total number.	Number paved and drained.	Number unpaved.
1910 ... ... 1911 ... ... 1912	*nil*	*nil*	*nil*

7. SLAUGHTER-HOUSES.

—	Total number.	Number paved and drained.	Number unpaved.
1910 ... ... 1911 ... ... 1912	*nil*	*nil*	*nil*

8. LATRINES.

—	For Males.		For Females.	
	Number.	Number of Seats.	Number.	Number of Seats.
Number of Public Latrines (Pit Latrines) :—				
1910	8		8	
1911				
1912				
Number of new Public Latrines erected during the year :—				
1910	*nil*		*nil*	
1911				
1912				
Number of Public Latrines repaired during the year :—				
1910	*nil*		*nil*	
1911				
1912				
Number of Public Latrines demolished during the year :—				
1910	*nil*		*nil*	
1911				
1912				

——	1910.	1911.	1912.
Number of Private Latrines	11		
Average number of pails of nightsoil removed daily	1		
Average number of soiled pails removed and clean pails substituted ...	22		
Number of nightsoil men employed to clean latrines and remove excreta ...	*nil*		
Number of cesspools	*nil*		
Number of cesspools cleansed	*nil*		
Number of new cesspools constructed during the year	*nil*		
Number of old cesspools abolished	*nil*		
Number of cesspools oiled regularly by Department	*nil*		

9. REMOVAL OF REFUSE.

——	1910.	1911.	1912.
Number of dustbins	*nil*		
Number of carts (if employed) at work daily to remove refuse from streets			
Amount of refuse removed daily from streets	*nil*		
Number of carts (if employed) at work daily to remove refuse from yards and premises	*nil*		
Amount of refuse removed daily from yards and premises			
Number of men employed for moving refuse			

10. MODE OF DISPOSAL OF EXCRETA, REFUSE AND OFFAL.

——	Daily average number of pails of excreta.			Daily average number of cartloads of refuse.			Daily average number of cartloads of Slaughter House and Market Offal.		
	1910.	1911.	1912.	1910.	1911.	1912.	1910.	1911.	1912.
Buried or trenched	1			*nil*			*nil*		
Burnt									
Thrown into sea									
*Otherwise dealt with									

* State mode of disposal.

11. AVERAGE DAILY NUMBER OF CARTLOADS OF TIN CANS, BOTTLES, BROKEN CROCKERY AND OTHER INCOMBUSTIBLE MATERIAL REMOVED FROM HOUSES, HUTS, AND COMPOUNDS.

1910.	1911.	1912.
nil		

12. WATER SUPPLY.

Nature of Water Supply.	1910.	1911.	1912.
Pipe-borne water :—			
Source (river, lake, or spring) :—			
Number of linear yards	*nil*		
Number of stand pipes along roads...			
Number of stand pipes in compounds and houses			
Wells :—			
Public :—			
Number	*nil*		
Number with pumps protected against surface-water and mosquito-protected			
Private :—			
Number	*nil*		
Number protected against surface water and mosquito-protected			
Tanks :—			
Public :—			
Number under ground	*nil*		
Number mosquito-protected and served by pumps... ...			
Number above ground			
Number mosquito-protected...			
Number of 400 gallons capacity or less			
Number above 400 gallons			

——	1910.	1911.	1912.
Tanks :—			
Private :—			
Number under ground	*nil*		
Number mosquito-protected			
Number above ground			
Number mosquito-protected			
Number of 400 gallons capacity or less			
Number above 400 gallons			
Nature of tanks :—			
Wood			
Iron			
Concrete			
Barrels :—			
Number	*nil*		
Number mosquito-protected			

13. DRAINAGE.

Nature of drainage.	Public.	Private.
Masonry drains :—		
Linear yards of masonry drains :—		
1910	*nil*	*nil*
1911		
1912		
Linear yards reconstructed during the year :—		
1910	*nil*	*nil*
1911		
1912		
Linear yards repaired during the year :—		
1910	*nil*	*nil*
1911		
1912		
Linear yards of new drains constructed during the year :—		
1910	*nil*	*nil*
1911		
1912		
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—		
1910	500	
1911		
1912		
Number of linear yards of ditches dug and graded :—		
1910	500	
1911		
1912		
Average frequency of clearing ditches of grass :—		
1910		
1911		
1912		

14. CLEARANCE OF UNDERGROWTH, LONG GRASS AND JUNGLE.

——	1910.	1911.	1912.
Number of square yards of weeds, grass, and vegetation cut and removed	5,100		
Average frequency of clearance of rank vegetation on same area			

15. EXCAVATIONS AND LOW-LYING LAND.

—	1910.	1911.	1912.
Number of pools and excavations	*nil*		
Number of excavations filled up	*nil*		
Amount of low-lying and marsh land raised and drained	*nil*		
Number of pools, marshes, streams, &c., fish-stocked	*nil*		
Number of cubic yards of material used for filling up pools and excavations	*nil*		
Number of persons fined for making new excavations	*nil*		
Average number of men daily employed in filling up pools, &c. ...	*nil*		

16. OILING.

—	1910.	1911.	1912.
Number of drains oiled	*nil*		
Number of pools and excavations oiled	*nil*		
Number of tanks and barrels oiled	*nil*		
Average number of men daily employed for oiling drains, pools and watertanks or barrels	*nil*		

17. INSPECTIONS AND PROSECUTIONS.

—	1910.	1911.	1912.
Number of inspectors employed	1		
Number of houses inspected	62		
Number of houses where larvæ were found	*nil*		
Number of notices served to remove conditions causing the breeding of larvæ	*nil*		
Number of persons fined for having mosquito larvæ on premises ...	*nil*		
Number of notices served to remove insanitary conditions on premises	11		
Number of persons fined for not removing insanitary conditions after notice	1		
Number of soda and aerated water factories inspected	*nil*		

(SIGNED) G. d'AMICO,

MEDICAL OFFICER.

GOLD COAST.

No.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR IN THE TOWN.

1. Name of Town: TARQUAH.

——	Approximate Area.	Number of proclaimed open spaces.
1910	1½ Sq. Miles (approx.)	*nil*
1911		
1912		

2. Population.

——	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910			58	2	60
1911					
1912					

3. Housing.

——	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses :—		
1910	17	420 (approx.)
1911		
1912		

Number of Huts :—
1910 ... ...
1911 ... ...
1912 ... ...

4. Mosquito Protection of Houses.

——	1910.	1911.	1912.
Number of European houses wholly mosquito-protected	*nil*		
Number of European houses with mosquito room	*nil*		
Number rendered during the year wholly mosquito-protected ...	*nil*		
Number rendered during the year partially mosquito-protected ...	*nil*		

5. Erection of New Buildings during the Year.

——	1910.	1911.	1912.
Number of public buildings erected with sanction as to site, construction and relation to other buildings	4		
Number of houses erected with sanction as to site, construction, and relation to other buildings			
Number of huts erected with sanction as to site, construction, and relation to other buildings			
Number of houses built without sanction	*nil*		
Number of huts built without sanction	*nil*		

ACTION TAKEN :—

——	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910	*nil*	1	*nil*	*nil*
1911				
1912				

6. MARKETS.

——	Total number.	Number paved and drained.	Number unpaved.
1910	1	*nil*	1
1911			
1912			

7. SLAUGHTER-HOUSES.

——	Total number.	Number paved and drained.	Number unpaved.
1910	1	1	*nil*
1911			
1912			

8. LATRINES.

——	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :				
1910	11	77	6	42
1911				
1912				
Number of new Public Latrines erected during the year :—				
1910	2	14		
1911				
1912				
Number of Public Latrines repaired during the year :—				
1910	15			
1911				
1912				
Number of Public Latrines demolished during the year :—				
1910	*nil*			
1911				
1912				

——	1910.	1911.	1912.
Number of Private Latrines	30		
Average number of pails of nightsoil removed daily	149		
Average number of soiled pails removed and clean pails substituted ...	*nil*		
Number of nightsoil men employed to clean Latrines and remove excreta ...	15		
Number of cesspools	*nil*		
Number of cesspools cleansed			
Number of new cesspools constructed during the year			
Number of old cesspools abolished			
Number of cesspools oiled regularly by Department			

9. REMOVAL OF REFUSE

—	1910.	1911.	1912.
Number of dustbins	*nil*		
Number of carts (if employed) at work daily to remove refuse from streets	*nil*		
Amount of refuse removed daily from streets	6 barrels full		
Number of carts (if employed) at work daily to remove refuse from yards and premises	*nil*		
Amount of refuse removed daily from yards and premises...	*nil*		
Number of men employed for moving refuse	6		

10. MODE OF DISPOSAL OF EXCRETA, REFUSE, AND OFFAL.

—	Daily average number of pails of excreta.			Daily average number of cartloads of refuse.			Daily average number of cartloads of Slaughter House and Market offal.		
	1910.	1911.	1912.	1910.	1911.	1912.	1910.	1911.	1912.
Buried or trenched	149			*nil*			*nil*		
Burnt									
Thrown into sea	*nil*								
*Otherwise dealt with									

* State mode of disposal.

11. AVERAGE DAILY NUMBER OF CARTLOADS OF TIN CANS, BOTTLES, BROKEN CROCKERY, AND OTHER INCOMBUSTIBLE MATERIAL REMOVED FROM HOUSES, HUTS AND COMPOUNDS.

1910.	1911.	1912.
2 barrels full		

12. WATER SUPPLY.

Nature of Water Supply.	1910.	1911.	1912.
Pipe-borne water :—			
Source (river, lake or spring) :—			
Number of linear yards			
Number of stand pipes along roads	*nil*		
Number of stand pipes in compounds and houses ...			
Wells :—			
Public :—			
Number	4		
Number with pumps protected against surface water and mosquito-protected	3		
Private :—			
Number	21		
Number protected against surface water and mosquito-protected	*nil*		
Tanks :—			
Public :—			
Number underground			
Number mosquito-protected and served by pumps ...			
Number above ground	*nil*		
Number mosquito-protected			
Number of 400 gallons capacity or less			
Number above 400 gallons			

——	1910.	1911.	1912.
Tanks :—			
Private :—			
Number Underground	3		
Number mosquito-protected	3		
Number above ground	34		
Number mosquito protected	34		
Number of 400 gallons capacity or less			
Number above 400 gallons...			
Nature of tanks :—			
Wood	7		
Iron	27		
Concrete	3		
Barrels :—			
Number	82		
Number mosquito-protected	82		

13. DRAINAGE.

Nature of Drainage.	Public.	Private.
Masonry drains :—		
Linear yards of masonry drains :—		
1910		
1911		
1912		
Linear yards reconstructed during the year :—		
1910		
1911		
1912		
Linear yards repaired during the year :—		
1910		
1911		
1912		
Linear yards of new drains constructed during the year :—		
1910	334½ yards.	
1911		
1912		
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—		
1910		
1911		
1912		
Number of linear yards of ditches dug and graded :—		
1910		
1911		
1912		
Average frequency of clearing ditches of grass :—		
1910		
1911		
1912		

14. CLEARANCE OF UNDERGROWTH, LONG GRASS AND JUNGLE.

——	1910.	1911.	1912.
Number of square yards of weeds, grass, and vegetation cut and removed	320,000 sq. yds. (approx.)		
Average frequency of clearance of rank vegetation on same area ...	Once in 6 weeks.		

15. EXCAVATIONS AND LOW-LYING LAND.

——	1910.	1911.	1912.
Number of pools and excavations	42		
Number of excavations filled up	118		
Amount of low-lying and marsh land raised and drained	900 sq. yds.		
Number of pools, marshes, streams, &c., fish stocked	*nil*		
Number of cubic yards of material used for filling up pools and excavations			
Number of persons fined for making new excavations	*nil*		
Average number of men daily employed in filling up pools, &c. ...	9		

16. OILING.

——	1910.	1911.	1912.
Number of drains oiled	8		
Number of pools and excavations oiled	42		
Number of tanks and barrels oiled	34		
Average number of men daily employed for oiling drains, pools, and watertanks or barrels	5		

17. INSPECTIONS AND PROSECUTIONS.

——	1910.	1911.	1912.
Number of inspectors employed	1 for 6 mths., 2 for 6 mths.		
Number of houses inspected	1675		
Number of houses where larvæ were found	134		
Number of notices served to remove conditions causing the breeding of larvæ	45		
Number of persons fined for having mosquito larvæ on premises ...	56		
Number of notices served to remove insanitary conditions on premises	152		
Number of persons fined for not removing insanitary conditions after notice ... ...:	123		
Number of soda and aerated water factories inspected	*nil*		

This return does not include any of the mines, in Tarquah, nor the native villages belonging to the mines.

(Sgd.) C. W. SMOULET BOGGS,

M.O.

GOLD COAST.

No.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR IN THE TOWN.

1. NAME OF TOWN: WA. N.T.

——	Approximate area.	Number of proclaimed open spaces.
1910	3 Square miles.	None proclaimed as such in Wa.
1911		
1912		

2. POPULATION.

——	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910	782	1,179	7*	—	1,966*
1911					
1912					

* Residents during year, including two resident temporarily for duty.

3. HOUSING.

——	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses :—		
1910	3	3,912 (tenements or rooms in 93 compounds).
1911		
1912		

Number of Huts :—	
1910	560
1911	
1912	

4. MOSQUITO PROTECTION OF HOUSES.

——	1910.	1911.	1912.
Number of European houses wholly mosquito-protected	—		
Number of European houses with mosquito room	—		
Number rendered during the year wholly mosquito-protected ...	—		
Number rendered during the year partially mosquito-protected ...	—		

5. ERECTION OF NEW BUILDINGS DURING THE YEAR.

——	1910.	1911.	1912.
Number of public buildings erected with sanction as to site, construction, and relation to other buildings	—		
Number of houses erected with sanction as to site, construction, and relation to other buildings	—		
Number of huts erected with sanction as to site, construction, and relation to other buildings	—		
Number of houses built without sanction (not required in Wa so far)	21		
Number of huts built without sanction do.	13		

Action taken :—

	Number of Prosecutions.		Number demolished.	
—	Huts.	Houses.	Huts.	Houses.
1910	—	—	6	2
1911				
1912				

6. Markets.

—	Total number.	Number paved and drained.	Number unpaved.
1910	1	—	1
1911			
1912			

7. Slaughter-houses.

—	Total number.	Number paved and drained.	Number unpaved.
1910	1	—	1
1911			
1912			

8. Latrines.

	For Males.		For Females.	
—	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—				
1910	494	5 in each.	493	5 in each.
1911				
1912				
Number of new Public Latrines erected during the year :—				
1910	93	do.	93	do.
1911				
1912				
Number of Public Latrines repaired during the year :—				
1910	12	do.	10	do.
1911				
1912				
Number of Public Latrines demolished during the year :—				
1910	9	do.	8	do.
1911				
1912				

—	1910.	1911.	1912.
Number of Private Latrines	6		
Average number of pails of nightsoil removed daily...	2		
Average number of soiled pails removed and clean pails substituted ...	—		
Number of nightsoil men employed to clean latrines and remove excreta ...	2 prisoners		
Number of cesspools	—		
Number of cesspools cleansed	—		
Number of new cesspools constructed during the year	—		
Number of old cesspools abolished	—		
Number of cesspools oiled regularly by Department	—		

9. REMOVAL OF REFUSE.

——	1910.	1911.	1912.
Number of dustbins	—		
Number of carts (if employed) at work daily to remove refuse from streets	—		
Amount of refuse removed daily from streets	About 10	loads.	
Number of carts (if employed) at work daily to remove refuse from yards and premises.	—		
Amount of refuse removed daily from yards and premises	About 30	loads.	
Number of men employed for moving refuse...	40		

10. MODE OF DISPOSAL OF EXCRETA, REFUSE AND OFFAL.

——	Daily average number of pails of excreta.			Daily average number of cartloads of refuse.			Daily average number of cartloads of Slaughter House and Market Offal.		
	1910.	1911.	1912.	1910.	1911.	1912.	1910.	1911.	1912.
Buried or trenched ... ... Burnt ... ... Thrown into sea ... ... *Otherwise dealt with	Pails n	ot used.		About burnt but bu burnt	40 loads in dry ried an in the r	season d partly ains.	About	1 load.	

* State mode of disposal.

11.—AVERAGE DAILY NUMBER OF CARTLOADS OF TIN CANS, BOTTLES, BROKEN CROCKERY AND OTHER INCOMBUSTIBLE MATERIAL REMOVED FROM HOUSES, HUTS AND COMPOUNDS.

1910.	1911.	1912.

12. WATER SUPPLY.

Nature of Water Supply.	1910.	1911.	1912.
Pipe-borne water :—			
Source (river, lake or spring) :—			
Number of linear yards	—		
Number of stand pipes along roads...	—		
Number of stand pipes in compounds and houses	—		
Wells :—			
Public :—			
Number	6		
Number with pumps protected against surface water and mosquito-protected.	—		
Private :—			
Number	42		
Number protected against surface water and mosquito-protected.	—		
Tanks :—			
Public :—			
Number under ground	—		
Number mosquito-protected and served by pumps ...	—		
Number above ground	—		
Number mosquito-protected...	—		
Number of 400 gallons capacity or less	—		
Number above 400 gallons	—		

——	1910.	1911.	1912.
Tanks :—			
Private :—			
Number under ground	—		
Number mosquito-protected	—		
Number above ground	—		
Number mosquito-protected	—		
Number of 400 gallons capacity or less	—		
Number above 400 gallons	—		
Nature of tanks :—			
Wood	—		
Iron	—		
Concrete	—		
Barrels :—			
Number	—		
Number mosquito-protected...	—		

13. DRAINAGE.

Nature of drainage.	Public.	Private.
Masonry drains :—		
Linear yards of masonry drains :—		
1910	—	
1911		
1912		
Linear yards reconstructed during the year :—		
1910	—	
1911		
1912		
Linear yards repaired during the year :—		
1910	—	
1911		
1912		
Linear yards of new drains constructed during the year :—		
1910	—	
1911		
1912		
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—		
1910	105	
1911		
1912		
Number of linear yards of ditches dug and graded :—		
1910		
1911		
1912		
Average frequency of clearing ditches of grass :—		
1910	Monthly	
1911		
1912		

14. CLEARANCE OF UNDERGROWTH, LONG GRASS AND JUNGLE.

——	1910.	1911.	1912.
Number of square yards of weeds, grass, and vegetation cut and removed.	About 9,500		
Average frequency of clearance of rank vegetation on same area ...	Monthly		

15. EXCAVATIONS AND LOW-LYING LAND.

——	1910.	1911.	1912.
Number of pools and excavations	183		
Number of excavations filled up	180		
Amount of low-lying and marsh land raised and drained	4		
Number of pools, marshes, streams, &c., fish stocked	—		
Number of cubic yards of material used for filling up pools and excavations	1,200		
Number of persons fined for making new excavations	—		
Average number of men daily employed in filling up pools, &c. ...	3		

16. OILING.

——	1910.	1911.	1912.
Number of drains oiled	66		
Number of pools and excavations oiled	108		
Number of tanks and barrels oiled	—		
Average number of men daily employed for oiling drains, pools, and watertanks or barrels	4		

17. INSPECTIONS AND PROSECUTIONS.

——	1910.	1911.	1912.
Number of inspectors employed	The dresser acts as such.		
Number of houses inspected	3,950		
Number of houses where larvæ were found	9		
Number of notices served to remove conditions causing the breeding of larvæ	60		
Number of persons fined for having mosquito larvæ on premises	1		
Number of notices served to remove insanitary conditions on premises	318		
Number of persons fined for not removing insanitary conditions after notice ... ... :..	36		
Number of soda and aerated water factories inspected	—		

N.B.—1. The men shown as employed for various sanitary work are householders or persons residing in the vicinity (unpaid). Only two paid scavengers are employed for all sanitary work.

2. No carts or dustbins in this Station. The loads being head loads, and not of uniform weight, are taken only as approximate.

(Sgd.) P. M. TOBIT,
M.O.

THE SENIOR SANITARY OFFICER,
ACCRA.

GOLD COAST.

No.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR IN THE TOWN.

1. Name of Town : WINNEBAH.

——	Approximate area.	Number of proclaimed open spaces.
1910	About 200 acres.	
1911		
1912		

2. Population.

——	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910	About (Intld.)	5,000 T.E.R.	39	6	5,045
1911					
1912					

3. Housing.

——	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses :—		
1910	9 in Winnebah (2 double quarters)	256 (zinc or tiled roofs)
1911		
1912		

Number of Huts :—
1910 ... ... 726 (this includes all thatched-roof buildings)
1911 ... ...
1912 ... ...

4. Mosquito Protection of Houses.

——	1910.	1911.	1912.
Number of European houses wholly mosquito-protected	1		
Number of European houses with mosquito room	*nil*		
Number rendered during the year wholly mosquito-protected ...	,,		
Number rendered during the year partially mosquito-protected ...	,,		

5. Erection of New Buildings During the Year.

——	1910.	1911.	1912.
Number of public buildings erected with sanction as to site, construction, and relation to other buildings	3		Hospital. *Dispenser's Quarters. Bungalow & Customs Warehouse. *Isolation Huts.
Number of houses erected with sanction as to site, construction, and relation to other buildings	30		
Number of huts erected with sanction as to site, construction, and relation to other buildings	2 known		
Number of houses built without sanction	no record		
Number of huts built without sanction	no record		

Note :—In the last three months of the year permits were rigidly insisted upon, but no definite record can be given for 1910.

ACTION TAKEN :—

	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910		11	30 ruins	3 dangerous houses
1911				
1912				

6. MARKETS.

——	Total Number.	Number paved and drained.	Number unpaved.
1910	2	2	*nil*
1911			
1912			

7. SLAUGHTER-HOUSES.

——	Total Number.	Number paved and drained.	Number unpaved.
1910	*nil*	*nil*	*nil*
1911			
1912			

8. LATRINES.

——	For Males.		For Females.	
	Number.	Number of Seats.	Number.	Number of Seats.
Number of Public Latrines :—				
1910	8	62	8	48
1911				
1912				
Number of new Public Latrines erected during the year :—				
1910	1	8	1	6
1911				
1912				
Number of Public Latrines repaired during the year :—				
1910	4	—	3	—
1911				
1912				
Number of Public Latrines demolished during the year :—				
1910	*nil*		*nil*	
1911				
1912				

——	1910.	1911.	1912.
Number of Private Latrines			
Average number of pails of nightsoil removed daily	248		
Average number of soiled pails removed and clean pails substituted ...	*nil*		
Number of nightsoil men employed to clean latrines and remove excreta ...	12 prisoners.		
Number of cesspools	Included in pools or excavation.		
Number of cesspools cleansed			
Number of new cesspools constructed during the year			
Number of old cesspools abolished			
Number of cesspools oiled regularly by Department			

9. REMOVAL OF REFUSE.

——	1910.	1911.	1912.
Number of dustbins	14		
Number of carts (if employed) at work daily to remove refuse from streets...	3		
Amount of refuse removed daily from streets	28 cartloads		
Number of carts (if employed) at work daily to remove refuse from yards and premises	*nil*		
Amount of refuse removed daily from yards and premises	*nil*		
Number of men employed for moving refuse	14		

10. MODE OF DISPOSAL OF EXCRETA, REFUSE AND OFFAL.

——	Daily average number of pails of excreta.			Daily average number of cartloads of refuse.			Daily average number of cartloads of Slaughter House and Market Offal.		
	1910.	1911.	1912.	1910.	1911.	1912.	1910.	1911.	1912.
Buried or trenched	*nil*			28			*nil*		
Burnt	—								
Thrown into sea	248								
*Otherwise dealt with	—								

* State mode of disposal.

11. AVERAGE DAILY NUMBER OF CARTLOADS OF TIN CANS, BOTTLES, BROKEN CROCKERY AND OTHER INCOMBUSTIBLE MATERIAL REMOVED FROM HOUSES, HUTS AND COMPOUNDS.

1910.	1911.	1912.
Included in refuse thrown into authorised holes by owners.		

12. WATER SUPPLY.

Nature of Water Supply.	1910.	1911.	1912.
Pipe-borne water:—			
Source (river, lake or spring):—			
Number of linear yards	*nil*		
Number of stand pipes along roads			
Number of stand pipes in compounds and houses ...			
Wells:—			
Public:—			
Number	*nil*		
Number with pumps protected against surface water and mosquito-protected.			
Private:—			
Number	72		
Number protected against surface water and mosquito-protected	50		
Tanks:—			
Public:—			
Number undergound	*nil*		
Number mosquito-protected and served by pumps ...			
Number above ground			
Number mosquito-protected			
Number of 400 gallons capacity or less			
Number above 400 gallons			

——	1910.	1911.	1912.
Tanks :—			
Private :—			
Number Underground	3		
Number mosquito-protected	2		
Number above ground	60		
Number mosquito-protected	60		
Number of 400 gallons capacity or less	50		
Number above 400 gallons	13		
Nature of tanks :—			
Wood	5		
Iron	45		
Concrete	13		
Barrels :—			
Number	96		
Number mosquito-protected	96		

13. DRAINAGE.

Nature of Drainage.	Public.	Private.
Masonry drains :—		
Linear yards of masonry drains :—		
1910	About 2,020 yards.	
1911		
1912		
Linear yards reconstructed during the year :—		
1910	*nil*	
1911		
1912		
Linear yards repaired during the year :—		
1910	*nil*	
1911		
1912		
Linear yards of new drains constructed during the year :—		
1910	760 yards.	
1911		
1912		
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—		
1910	Not estimated.	
1911		
1912		
Number of linear yards of ditches dug and graded :—		
1910	480 yards.	
1911		
1912		
Average frequency of clearing ditches of grass :—		
1910	Once a month.	
1911		
1912		

14. CLEARANCE OF UNDERGROWTH, LONG GRASS AND JUNGLE.

——	1910.	1911.	1912.
Number of square yards of weeds, grass, and vegetation cut and removed	All land in town to 50 yards from buildings three times in the last 6 months.		
Average frequency of clearance of rank vegetation on same area ...			

15. EXCAVATIONS AND LOW-LYING LAND.

——	1910.	1911.	1911.
Number of pools and excavations	162		
Number of excavations filled up	108		
Amount of low-lying and marsh land raised and drained	not measured		
Number of pools, marshes, streams, &c., fish-stocked...	*nil*		
Number of cubic yards of material used for filling up pools and excavations	Rubbish & old ruins not measured.		
Number of persons fined for making new excavations	4		
Average number of men daily employed in filling up pools, &c. ...	20		

16. OILING.

——	1910.	1911.	1912.
Number of drains oiled...	264		
Number of pools and excavations oiled	489		
Number of tanks and barrels oiled	2880		
Average number of men daily employed for oiling drains, pools, and watertanks or barrels	6		

17. INSPECTIONS AND PROSECUTIONS.

——	1910.	1911.	1912.
Number of inspectors employed	2 and 1 asst.		
Number of houses inspected	8366		
Number of houses where larvæ were found	1032		
Number of notices served to remove conditions causing the breeding of larvæ	567		
Number of persons fined for having mosquito larvæ on premises ...	159		
Number of notices served to remove insanitary conditions on premises	1020		
Number of persons fined for not removing insanitary conditions after notice...	212		
Number of soda and aerated water factories inspected	*nil*		

(Sgd.) J. LUNN,
Medical Officer,
WINNEBAH,
31st December, 1910.